Getting Started Guide

Fleet Manager Utility

Windows XP Pro/Windows 7 Software Application
Version 4.1

DV-1

WGD00058

Fleet Manager Utility (FMU) Getting Started Guide
Copyright © 2012 WatchGuard Video
All rights reserved.

WatchGuard and DV-1 are trademarks of WatchGuard Video.

Enforcement Video LLC is a Texas Limited Liability Company
doing business as WatchGuard Video.

WatchGuard Video
415 Century Parkway
Allen, Texas 75013

1-800-605-6734 Toll Free Sales
1-866-384-8567 Toll Free Support

SAFETY WARNINGS
To prevent fire or shock hazard, do not expose the DV-1 unit to rain or moisture. To avoid electrical shock, do not disassemble the DV-1 enclosure or place any objects other than the DVD inside the system. Refer servicing to qualified personnel only. The use of optical instruments with the DV-1 product will increase eye hazard. As the laser beam used in the DVD drive is harmful to eyes, do not attempt to disassemble the DVD drive. Refer servicing to qualified personnel only. Should any solid object or liquid fall into the DV-1 unit, disconnect the unit from power and have it checked by qualified personnel before further operation.

Table of Contents

1 Introduction 5
1.1 Welcome Statement and Company Values 5
1.2 About the Fleet Manager Utility 6
1.3 Notices, Cautions, and Warnings 6
1.4 Using This Document 7
1.5 Please Give Us Your Suggestions 7
1.6 Software Updates 8
1.7 Manufacturer Contact Information 8
1.8 Related Documents 8

2 Software Installation 9
2.1 Fleet Manager Utility Installation 9
2.2 Launching the WatchGuard Fleet Manager Utility 12
2.3 Application Version Information 12

3 Fleet Manager Utility Opening Screen 13
3.1 Configuration 13
3.2 Maintenance and Diagnostics 13
3.3 DV-1 Connection Settings 14

4 Configuring DV-1s in a Fleet 15
4.1 DV-1 Configuration Strategies 15
4.1.1 Simple Configurations for Small Departments 16
4.1.2 More Complex Configurations for Larger Departments 16
4.2 'Getting Started' Configuration Wizard 17
4.2.1 'Getting Started' Wizard – Department Name/Time Zone 18
4.2.2 'Getting Started' Wizard – Vehicle Identifier 18
4.2.3 'Getting Started' Wizard – Video Quality Mode 19
4.2.4 'Getting Started' Wizard – Officer List 19
4.2.5 'Getting Started' Wizard – Completion 20
4.2.6 Send to CD 21
4.2.6.1 Option A: Use Windows CD Writing Wizard (Windows XP only) 22
4.2.6.2 Option B: Use Your Favorite CD Burning Application 25
4.3 Importing Configuration Files into the DV-1 25
4.4 Editing Additional Configuration Settings 27
4.4.1 Department Policies 28
4.4.2 Department Default and Officer Preferences 29
4.4.3 Vehicle Settings 30
4.5 Factory Default Settings 32
4.6 Creating and Opening Multiple Configuration Files 36
4.7 Using a Master Template Configuration File 37
4.7.1 Copying Configuration Settings 38
4.7.1.1 Copy Officer List to New Configuration File 38
4.7.1.2 Copy Department Preferences to One or More Officers 39

5 Metadata Event Tags 41
5.1 Event Tag Definition 41
5.2 Special Screen Icons 41
5.3 Event Tags Main Screen 42
5.4 Adding Event Tags 43
5.4.1 Pre-Defined Event Tag Templates 43
5.4.1.1 Adding a Pre-Defined Dropdown List Event Tag 44
5.4.1.2 Adding a Pre-Defined Text Field Event Tag 46
5.4.2 Manually Adding a Dropdown List Event Tag 47
5.4.3 Manually Adding a Text Field Event Tag 49
5.4.4 Making an Answer Required or Optional 51

5.4.5 Creating a Non-Editable Default Tag 51
5.5 Changing the Order of Event Tags 52
5.6 Editing Event Tags 52

6 Maintenance and Diagnostics 55
6.1 Maintenance and Diagnostics Overview 55
6.2 Diagnostic Sessions 55
6.3 Diagnostic System Information 57
6.4 DV-1 Video Files List 58
6.5 Downloading Video Files from the DV-1 59
6.6 DV-1 Lost & Found Files List 61

7 Ethernet Connection to the DV-1 63
7.1 Is Ethernet Connectivity to the DV-1 Required? 63
7.2 DV-1 Ethernet/Network Connection Ports 63
7.2.1 Overhead DV-1 Ethernet Connection 63
7.2.2 Modular DV-1 Ethernet Connection 63
7.3 DV-1 Connection Methods 64
7.4 Computer Network Connection Settings 64
7.4.1 Changing Network Connection Settings 64
7.4.2 Restoring Network Connection Settings 69
7.5 Connection Settings Inside the Fleet Manager Utility 70

8 Index 71

Tables

Table 1 Department Default Preferences 32
Table 2 Department Default Policies 33
Table 3 Vehicle Default Preferences 35

1 Introduction

1.1 WELCOME STATEMENT AND COMPANY VALUES

Thank you for choosing the WatchGuard Video DV-1, the world's first in-car Direct-to-DVD Video system that records directly onto re-writable DVD-Video discs that play in regular DVD players. The company was founded to bring the finest mobile law enforcement technology to the market.

The WatchGuard DV-1 is the culmination of nearly 60 man-years of engineering development. This sophisticated system performs real-time DVD-Video authoring in a mobile environment. The proprietary computing platform employs a dual-drive architecture and optical drive ruggedization techniques developed for U.S. fighter jets. No company in this industry has invested more engineering capital, or has been more aggressive in research and development than WatchGuard Video. With seven patents pending, the WatchGuard DV-1 represents the most advanced technology available in the industry.

The management of WatchGuard Video places an emphasis on developing individual character qualities essential for true success, and the company is dedicated to maintaining a culture of service. Our management staff is encouraged to practice servant-based leadership within their groups with the knowledge that by serving God, people are empowered to better serve each other. This environment creates the framework for WatchGuard Video to ultimately serve our customers in a manner that instills the highest level of trust, confidence, and satisfaction.

1.2 ABOUT THE FLEET MANAGER UTILITY

The *Fleet Manager Utility* is a Windows XP/Windows 7-based application used to create configuration files that can be burned to a CD. This CD can then be loaded into the DV-1, and all the settings in the configuration file can be loaded into one or multiple vehicles. Settings include Department Name, Officer Names, Vehicle ID's, Pre- and Post-Event Times, etc. The *Fleet Manager Utility* is also capable of maintenance and diagnostics of the DV-1 through an Ethernet crossover cable connected to a PC.

Saving multiple configuration files on a single CD simplifies the process of loading different configurations onto different vehicles. The configuration file name is usually the vehicle ID name.

See *Configuring DV-1s in a Fleet* on page 15 for further details on the various strategies that can be utilized when deciding how to best configure a fleet of vehicles.

1.3 NOTICES, CAUTIONS, AND WARNINGS

NOTICE
Notices provide useful supplemental information that is pertinent to the task being described. They may appear either before or after the text to which they apply.

CAUTION!
Cautions describe critical information that, if ignored, could result in damage to the DV-1, inoperability or degradation in function, or injury to personnel. Cautions always appear before the critical text to which they apply.

WARNING!
Warnings provide information pertaining to possible data loss.

1.4 USING THIS DOCUMENT

This document is applicable to the *Fleet Manager Utility* (FMU) 4.0 for Windows XP Pro and Windows 7.

This document covers the following topics:

- **Software Installation** – Install the application on a PC
- **Configuring a Fleet of DV-1s** – Manage the configuration of all DV-1 systems in a fleet of vehicles
- **Metadata Event Tags** – Configure event tags for the DV-1 to prompt the in-car officer for answers to specific questions when ending a recording
- **Maintenance and Diagnostics** – Extract data from the DV-1's hard drive and perform basic diagnostics tests
- **Ethernet Connection to the DV-1** – Connect the *FMU* to a DV-1 device via an Ethernet connection

For other tasks not covered in this document, see *Related Documents* on page 8.

The left side of each page *usually* contains:

- Informational and procedural text
- Graphical depictions of the buttons/menus used to perform procedures
- Notices, cautions, or warnings

The right side of each page *usually* contains the resulting screen, an error message, or a success message. Once familiar with the *Fleet Manager Utility* (FMU) application, many of the tasks can quickly be spotted by glancing down the left side of the document.

1.5 PLEASE GIVE US YOUR SUGGESTIONS

We want to hear from you. Tell us about your experiences with the DV-1 device and the *Fleet Manager Utility* (FMU) application. We will do our best to accommodate any suggestions you may have in future software revisions.

U.S. customers, call Customer Service at 1-800-605-6734 or email us at support@watchguardvideo.com with your comments, questions, and concerns. International customers, contact your local distributor.

1.6 SOFTWARE UPDATES

We are committed to the continual testing and improvement of the *Fleet Manager Utility* software. Updates are provided to your agency for the life of the product, when available.

1.7 MANUFACTURER CONTACT INFORMATION

WatchGuard Video
Attn: Customer Service Department
415 Century Parkway
Allen, Texas 75013
1-800-605-6734
support@watchguardvideo.com

1.8 RELATED DOCUMENTS

Refer to www.watchguardvideo.com/support/ for the following supporting documentation:

- DV-1 User Manual
- DV-1 Quick Reference Guide
- Overhead System Installation Overview
- Modular System Installation Overview
- DV-1 Menu Navigation Guides (GUI)
- DVD Manager Utility (DMU) Getting Started Guide

2 Software Installation

2.1 FLEET MANAGER UTILITY INSTALLATION

Insert the *Fleet Manager Utility* CD into the in-car computer's CD drive. If autoplay is turned on for the drive, the installation begins automatically.

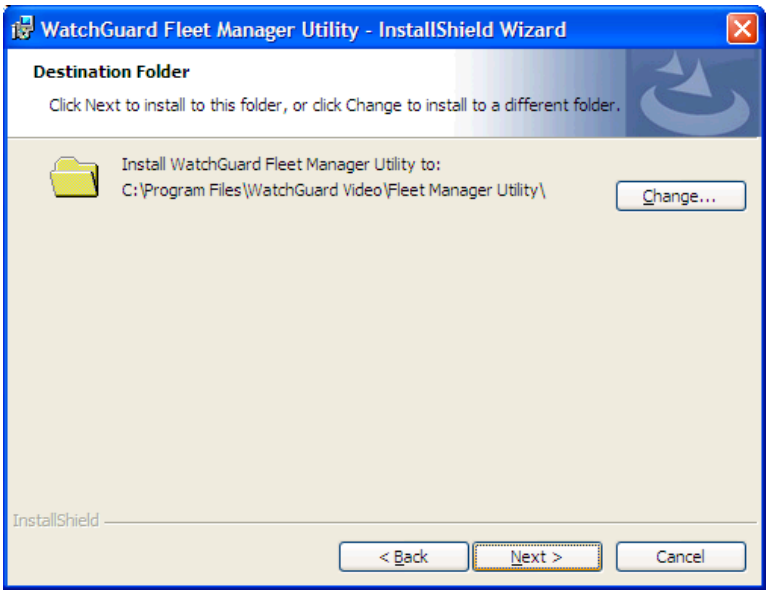
If autoplay is turned off for the CD drive, open the folder for the CD and click the **`setup.exe`** file to begin the installation process.

The initial installation screen displays.

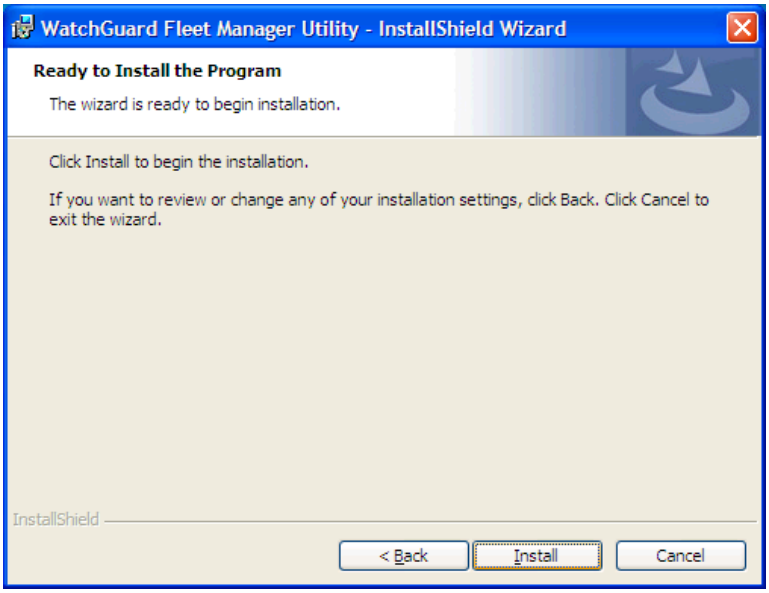
Click **Next** to continue.

To change the default installation location, click **Change...** and select a different location.

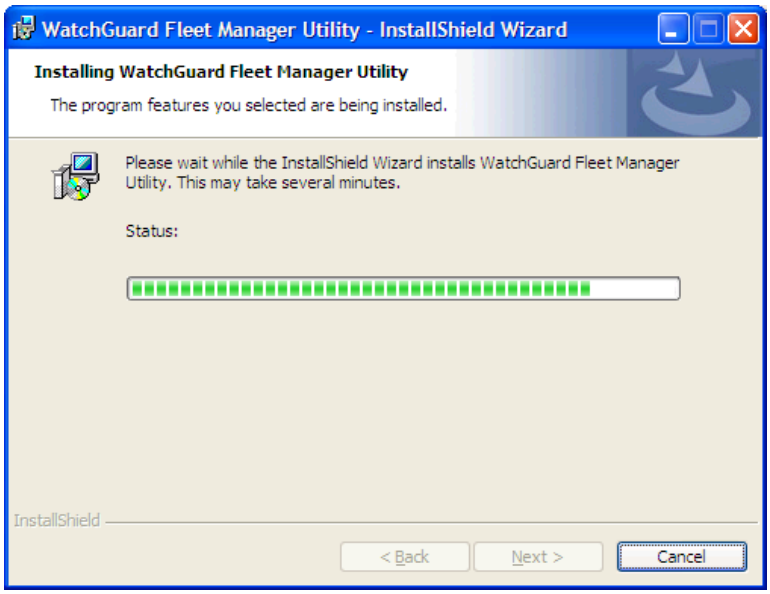
Click **Next** to continue.



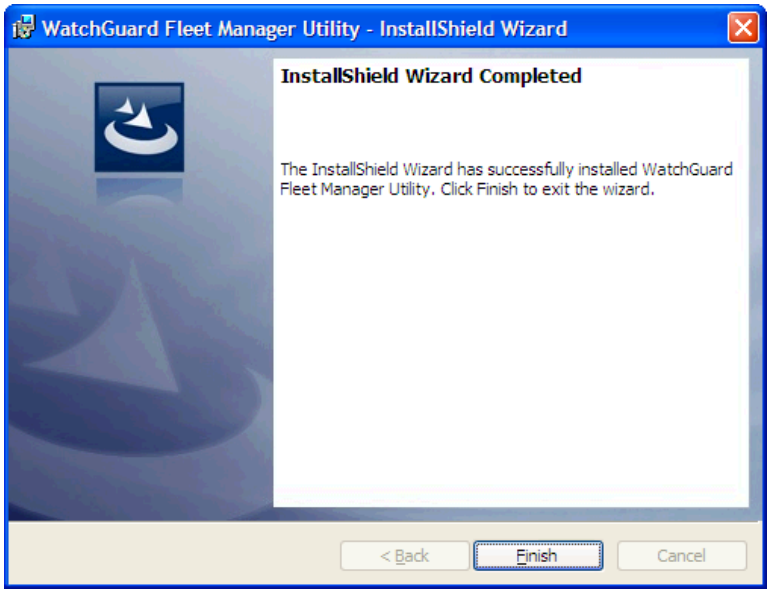
Click **Install** to install the application.



The installation continues.



Click **Finish** to complete the installation.

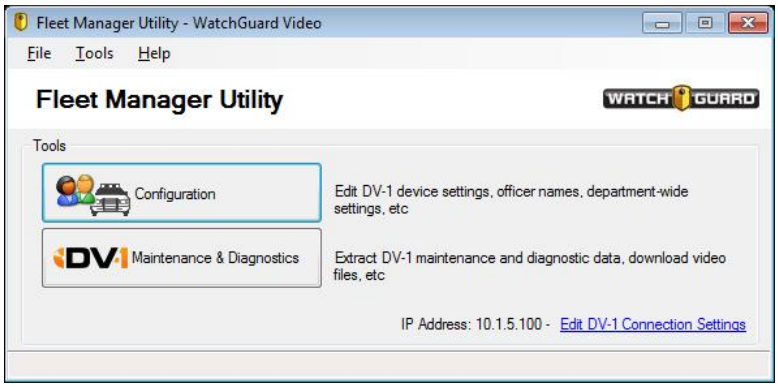


2.2 LAUNCHING THE WATCHGUARD FLEET MANAGER UTILITY

Once installation is complete, open the *FMU* application by launching the icon placed on the computer's desktop.

Alternatively, you may choose **Start** menu > **All Programs** > **WatchGuard Video** > **Fleet Manager Utility**.

The **Fleet Manager Utility** opening screen displays.



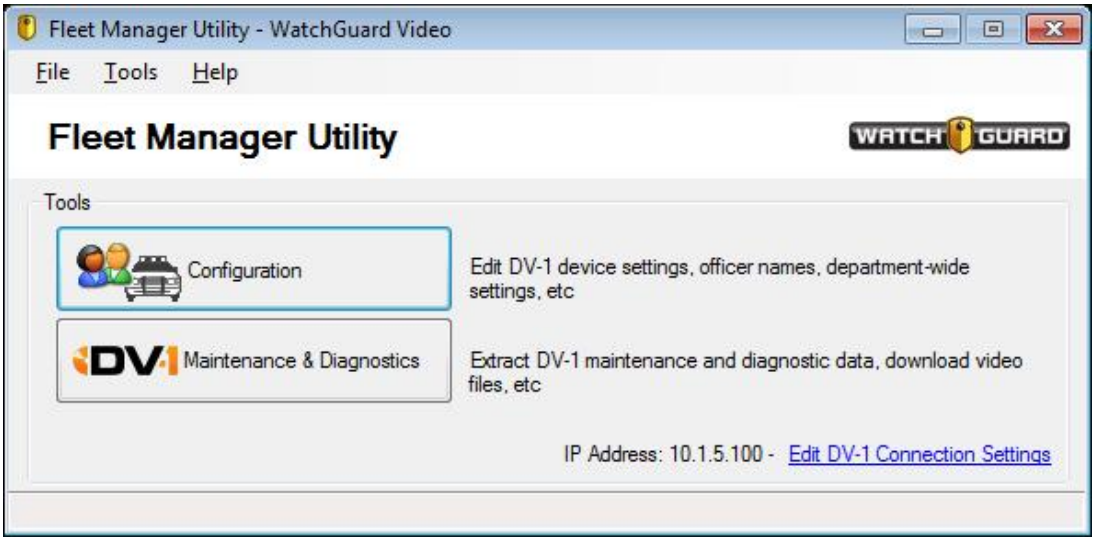
2.3 APPLICATION VERSION INFORMATION

To determine the current *FMU* version, select **Help** > **About...** from the application's main screen.

Showing this detailed version information is of assistance when communicating with WatchGuard Customer Service and/or in determining when it is necessary to upgrade to newer versions of the *FMU* and the DV-1 system software.

3 Fleet Manager Utility Opening Screen

3.1 CONFIGURATION



Click the **Configuration** button on the opening screen to enter the configuration area of the *FMU*. From here, you can manage department settings, officer preferences, and vehicle settings for each DV-1 in the fleet.

See *Configuring DV-1s in a Fleet* on page 15 for further details on the various strategies that can be utilized when deciding how to best configure a fleet of vehicles.

3.2 MAINTENANCE AND DIAGNOSTICS

A connection between the PC and the DV-1 device is required via an Ethernet connection in order to perform maintenance, run diagnostics tests, and/or extract diagnostics data from the DV-1.

From the opening screen, click the **Maintenance and Diagnostics** button. See *Maintenance and Diagnostics* on page 55 for further details.

3.3 DV-1 CONNECTION SETTINGS

The *FMU* can directly communicate with a DV-1 via a physical Ethernet cable that connects the *Personal Computer* (PC) to the DV-1. It can then send a configuration file to the DV-1 via this direct connection (bypassing the need to burn a CD).

The *FMU* and DV-1 should already have the proper IP addresses for connectivity; therefore, in most cases, you need not change these values; however, if physically connecting to the DV-1 via an Ethernet connection, the DV-1's IP address must be correctly set to successfully communicate through the Ethernet port.

See *Ethernet Connection to the DV-1* on page 63 for detailed information on how to make this connection.

4 Configuring DV-1s in a Fleet

4.1 DV-1 CONFIGURATION STRATEGIES

What is the best strategy for configuring all of the DV-1s in a fleet of vehicles? This chapter is devoted to answering that question in order to choose the best Department strategy.

The *FMU* has the ability to create one or more DV-1 configuration files. Think of these configuration files in much the same manner you might think of Microsoft Word documents or the individual files stored on the PC for an application like Microsoft Excel. There is one instance of the application installed; however, there can be many instances of the files created by the application.

Analogous to the practice that Microsoft Word files are created with a **`.doc`** or **`.docx`** file extension, WatchGuard configuration files are created with a **`.wgconfig`** file extension.

The *FMU* can have more than one configuration file open at a time so that comparisons of the differences between each file can be made. Also, the application supports the ability to copy/paste settings between configuration files. See *Copying Configuration Settings* on page 38 for details.

At this point, the question to answer is how many different DV-1 configurations are needed in order to manage all the DV-1s in your vehicle fleet.

Departments with a small number of vehicles and officers might be able to manage their DV-1 fleet configuration with the use of a single configuration file, while large departments with many vehicles and officers serving different roles will need a strategy that includes the creation of one configuration file for each vehicle that contains a DV-1 system.

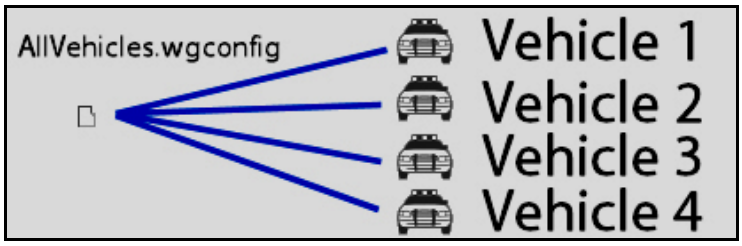
4.1.1 Simple Configurations for Small Departments

In general, a small department can implement a single configuration file strategy if the following conditions are *mostly* true:

- All officers driving DV-1 vehicles can operate any of the vehicles at any given time. (In other words, all officers rotate through any of the DV-1 vehicles.)
- *Department Default Preferences* for all DV-1s in the fleet have the same property values for officer permissions, recording properties, recording triggers, vehicle device settings, etc.

A single configuration file can be deployed to all DV-1s in the fleet if all vehicles and all officers in those vehicles require the same settings.

As the number of DV-1s and the number of officers serving different roles increases, it is likely that a single configuration file strategy is not the right answer.



4.1.2 More Complex Configurations for Larger Departments

If the vehicles/officers require different settings, then a single configuration file strategy won't work. Multiple configuration files may need to be created and managed. In the most complicated of cases, a unique configuration file can be created for each DV-1 vehicle in the fleet.

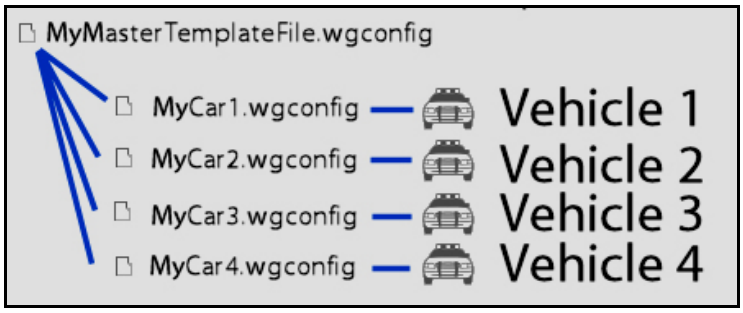
This strategy supports complete flexibility in allowing each vehicle to have a unique set of *Officer Preferences* and *Department Default Preferences* for each DV-1 in the fleet. This allows the same named officer to optionally have different settings for each vehicle since an officer might fill different roles based on what vehicle he/she is in at the time. Likewise, each vehicle in the fleet might have different input devices (e.g., radar, GPS, etc.) needing their own unique configuration.

Multiple configuration files can be deployed to each DV-1 in the fleet when the officers/vehicles require unique settings.

An option to help make complicated cases easier is to create a single configuration file which serves as a *Master Template Configuration File*. Use this template file to store some of the most common Officer and Department settings, and then use this file as a basis for newly created configuration files. In this case, a strategy might be to have one *Master Template Configuration File* and one configuration file for each DV-1 vehicle in the fleet.

See *Using a Master Template Configuration File* on page 37 for further details on using a template file.

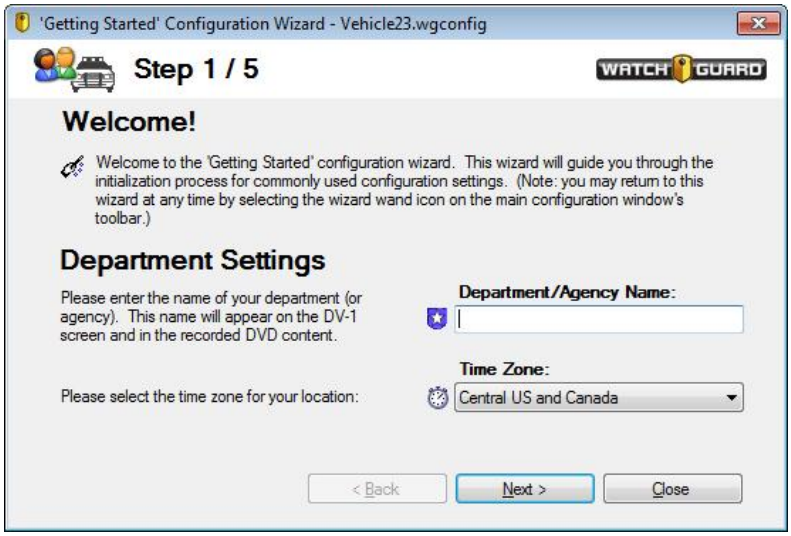
One file for each vehicle and one master template file



4.2 'GETTING STARTED' CONFIGURATION WIZARD

If it is the very first time to run the *FMU* application, the **'Getting Started' Configuration Wizard** launches to create the first configuration file. This wizard assists with configuring the most commonly used configuration settings.

NOTICE
The default name for the first configuration file created is **`VehicleConfig1.wgconfig`**. Configuration files can be named anything, as long as the **`.wgconfig`** file extension is preserved.



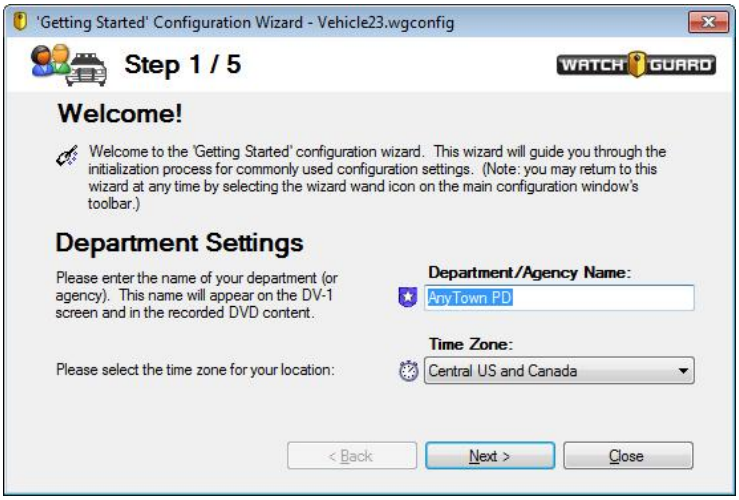
4.2.1 'Getting Started' Wizard – Department Name/Time Zone

Follow the prompts on each step of the wizard, clicking **Next** to proceed to subsequent steps and **Back** to navigate backwards. To skip the wizard altogether, click the **Close** button.

Enter the **Department/Agency Name** in the text box. This is the name that appears as caption text on the DV-1 screen and also in the menu title of DVDs created by the DV-1.

Select the **Time Zone** from the drop-down list.

Click **Next** to continue.



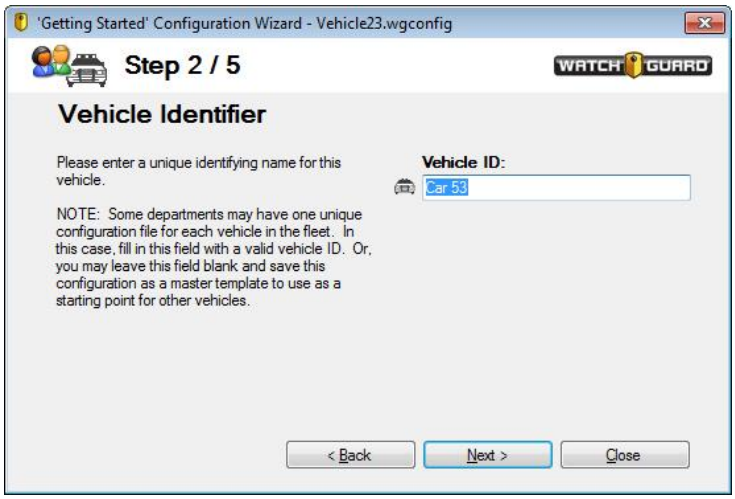
4.2.2 'Getting Started' Wizard – Vehicle Identifier

Enter a **Vehicle ID** to identify the vehicle for which the configuration file is to be used.

If the configuration file will be used for any of the following purposes, it is recommended that the Vehicle ID field remain blank:

- The configuration file will be used as a *Master Template Configuration File* from which all other vehicle's configuration files will originate
- There is more than one DV-1 vehicle in the fleet, but only one configuration file will be used for all DV-1 vehicles. (In this case, set the Vehicle ID for each DV-1 manually after deploying the configuration file to each DV-1.)

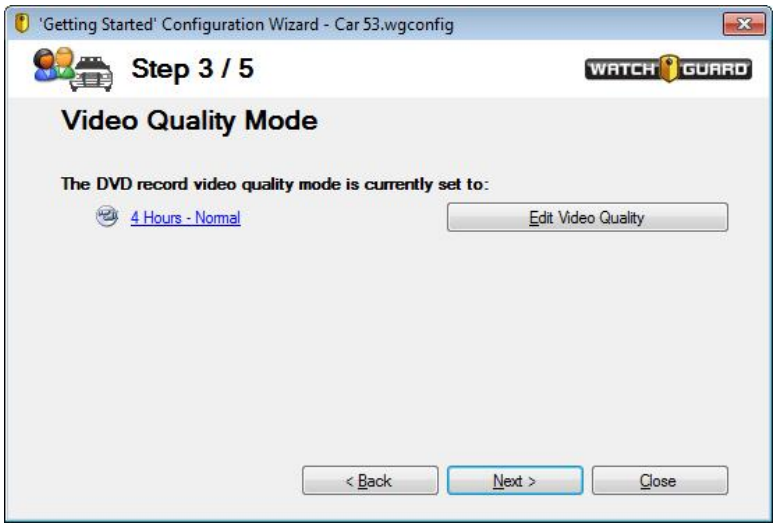
Click **Next** to continue.



4.2.3 'Getting Started' Wizard – Video Quality Mode

The factory default setting for **Video Quality Mode** is *4 Hours – Normal*. To change this setting, click the **Edit Video Quality** button and modify as desired.

Click **Next** to continue.

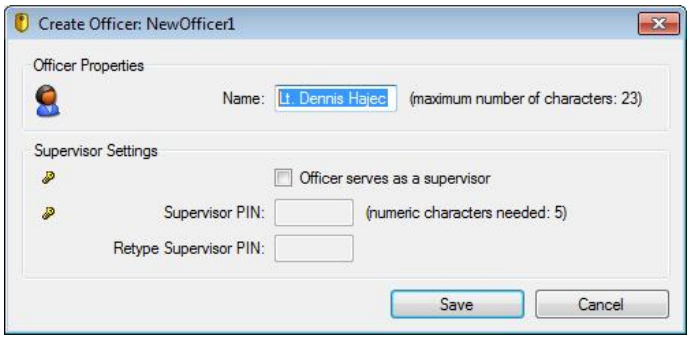


4.2.4 'Getting Started' Wizard – Officer List

Click the **New Officer** button.

The **Create Officer** screen displays.

Enter the officer’s name (maximum characters is 23). If the officer’s rank or title is desired, enter that in the field as well.



To give the officer Supervisor permission, check the **Officer serves as a supervisor** checkbox.

Enter a **Supervisor PIN** number (must be 5 numeric characters), and re-type it in the second PIN field.

Click **Save** to add the new officer name.

Repeat these steps for each officer and click the **Next** button to continue.

An officer with Supervisor permission can perform the following tasks:

- Add or delete users
- Determine operational parameters of the DV-1 (e.g., start/stop triggers, default user settings, etc.)
- Set Department Name
- Configure pre-/post-event times
- Choose video quality
- Determine which on-screen text is recorded to the DVD
- Configure input devices
- Update firmware
- Format the hard drive
- Burn backup DVDs

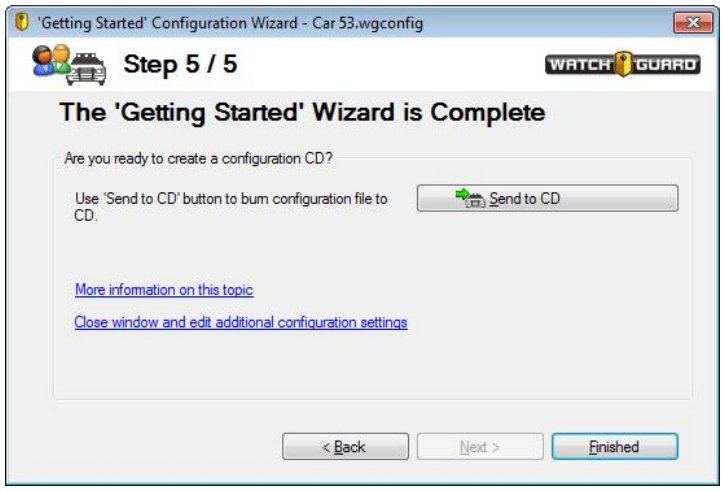
See the *DV-1 User Manual* for further details on functionality that is reserved for officers designated as Supervisors.

4.2.5 ‘Getting Started’ Wizard – Completion

Once you reach *Step 5* in the wizard, you have edited the most common configuration settings for the configuration file that you are currently creating.

You may now take one of the following actions:

- **Send to CD** – To deploy this configuration file to DV-1s in the fleet, burn this file to CD and insert the CD into one or more DV-1 devices. (Note that you can burn multiple configuration files to the same CD and use a single CD to configure multiple DV-1 devices.)
- **I'm not ready to create a CD. I want to close this window & edit additional configuration settings** – Click the **close this window...** link or the **Finished** button to close the dialog box and return to the main screen to continue editing.



4.2.6 Send to CD

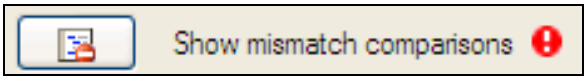
To burn the file to CD, click the **Send to CD** button in *Step 5* of the wizard.

The **Review and Confirm** screen displays, showing a brief summary of the configuration settings, serving as a quick sanity check before sending the configuration to CD.

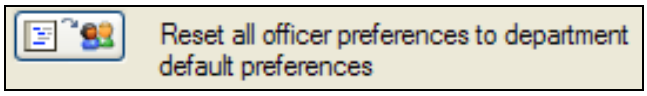
In the frame labeled **Officer Preferences vs. Department Default Preferences Mismatch**, a comparison of the *Department Default Preferences* and the *Officer Preferences* is shown. There are two supervisors and seven non-Supervisors defined in our example configuration file.

If internal department requirements dictate that all *Officer Preferences* must match the *Department Default Preferences*, then this is the step in the process to check for adherence to such a policy.

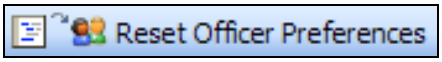
The numeric figures displayed in red and highlighted with the ❗ icon indicate how many officers have preferences that do not match the current *Department Default Preferences*. View which officers are mismatches by clicking the **Show mismatch comparisons** button.



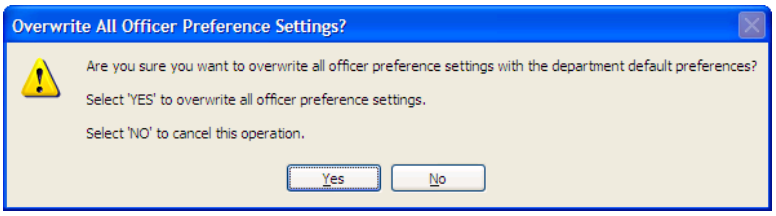
To force all *Officer Preferences* to be equal to the current *Department Default Preferences*, click the **Reset all officer preferences to department default preferences** button.



Alternatively, click the **Reset Officer Preferences** button on the main screen's toolbar to overwrite all *Officer Preferences* at any time.



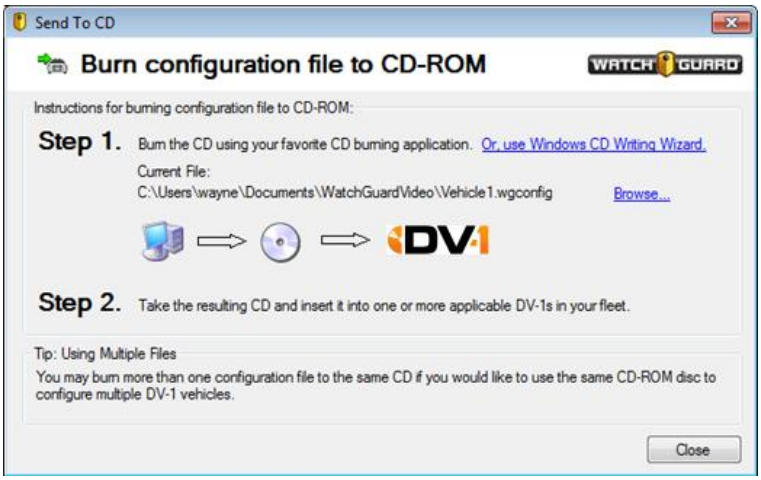
Click **Yes** at the confirmation screen to overwrite all officer preference settings, or **No** to return to the previous screen.



To burn the configuration file to CD, click the **Continue** button on the **Review and Confirm** screen.

The **Burn configuration file to CD-ROM** screen displays, allowing a choice of up to two options:

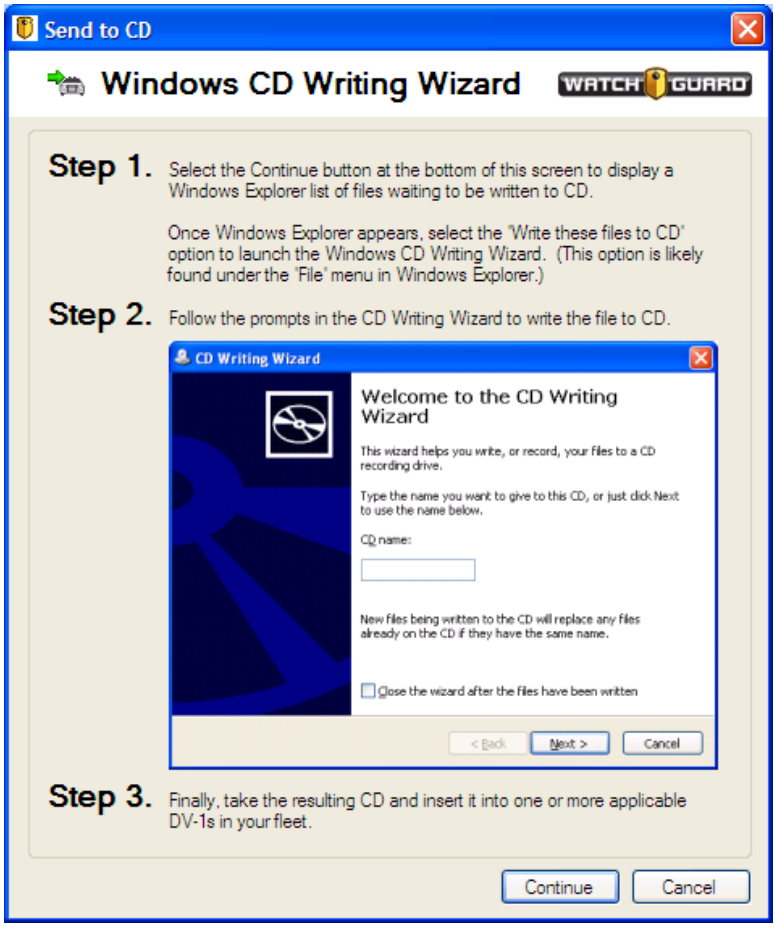
- **Option A** – Use Windows CD Writing Wizard (Only available in Windows XP)
- **Option B** – Use a CD burning application of your choice



4.2.6.1 Option A: Use Windows CD Writing Wizard (Windows XP only)

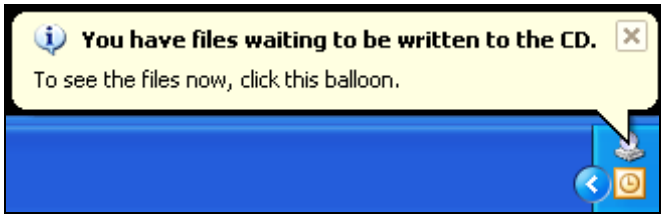
The *Windows CD Writing Wizard* is a part of the Windows XP operating system. (This option is not supported in Windows 7.)

To run this wizard, click the **use Windows CD Writing Wizard** link.



The **Windows CD Writing Wizard** screen displays.

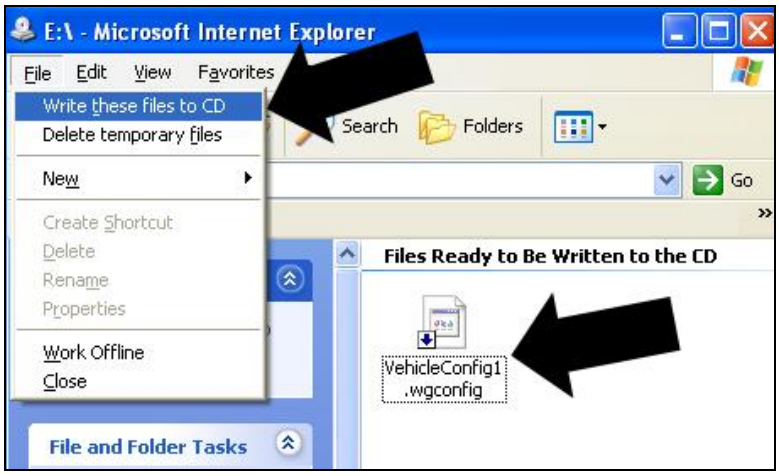
Click **Continue** to copy the configuration file into the directory containing files destined to be written to CD.



Depending upon the Windows version, this action may cause a notice to appear in the Windows system tray. Click the yellow balloon to see the files waiting to be written to the CD.

The *FMU* automatically opens a new instance of Windows Explorer showing the **Files Ready to Be Written to the CD** list for the computer’s CD drive.

When ready to burn the file to CD, select **File** > **Write these files to CD**.



Windows Explorer launches the *Windows CD Writing Wizard*.

Follow the prompts to write the configuration file to the root folder of the CD.

4.2.6.2 Option B: Use Your Favorite CD Burning Application

The full path location for the configuration file on the computer's hard drive is shown. Click the **Browse...** link to open Windows Explorer in the parent folder of the file to easily copy/paste or drag/drop the file into the desired CD burning application. Note that Windows 7 Windows Explorer natively supports the ability to burn files to a CD or data DVD.

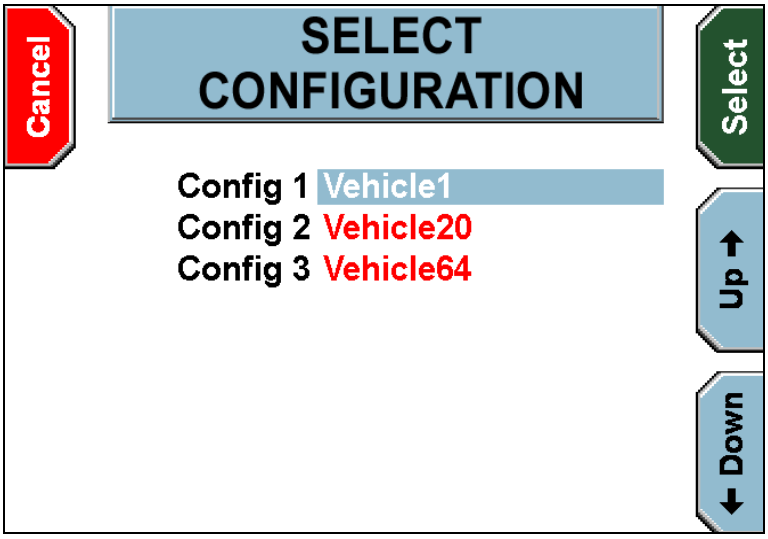
Once the configuration file is burned to the root folder of a CD, deploy the configuration by inserting the CD into one or more applicable DV-1s in the fleet.

4.3 IMPORTING CONFIGURATION FILES INTO THE DV-1

Once the configuration file(s) exist on the CD (regardless of the burn method used), insert it into the DV-1.

The DV-1 automatically displays a list of configuration files on the CD, allowing the operator to choose which configuration file to import to the DV-1.

Press the **Up**⬆ & **Down**⬇ keys to select the configuration file to import to the DV-1, and then press **Select**.

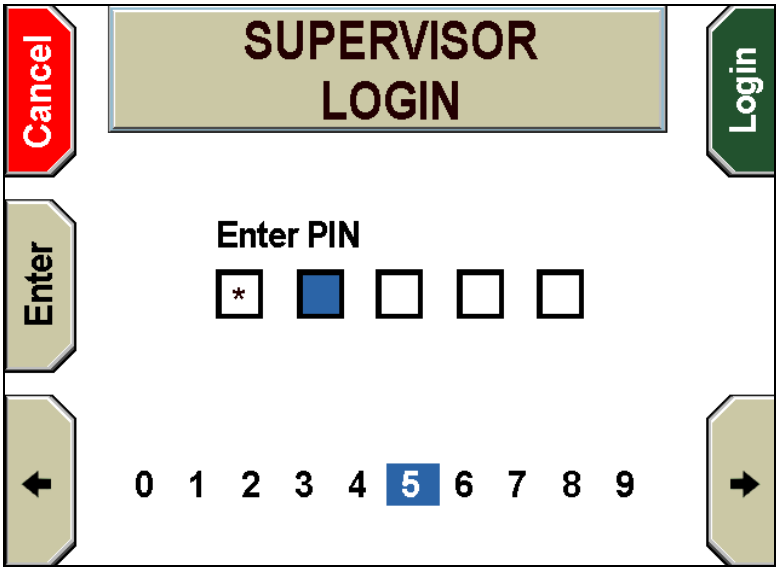


If one or more Supervisor officers is already configured on the target DV-1 (regardless of whether or not any Supervisors are defined in the configuration file being imported to the DV-1), the officer is prompted to enter a Supervisor PIN. A valid Supervisor PIN must be entered before the configuration file is allowed to be imported by the DV-1, and the PIN that is entered must be a PIN that existed previously on the DV-1.

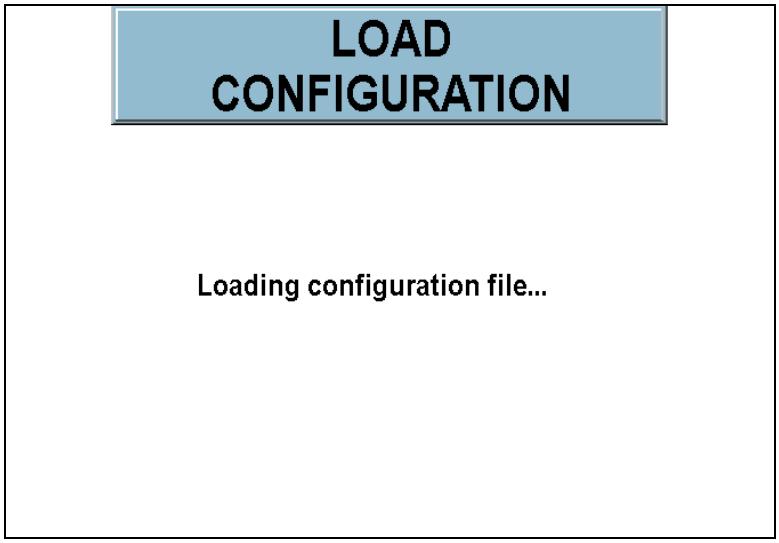
If no Supervisor PINs exist on the DV-1 at the time that the configuration file is imported, then the Administrator PIN must be entered instead.

Press the ⬅ and ➡ keys to navigate to the correct number, and then press **Enter** to select each number. If you enter an incorrect number, *Invalid PIN* is displayed and you must start over again.

Press **Cancel** before the fifth number is entered to exit without logging in. The **Login** key is automatically pressed when the fifth number is selected.



The **LOAD CONFIGURATION** screen displays, and the settings from the configuration file load to the DV-1.

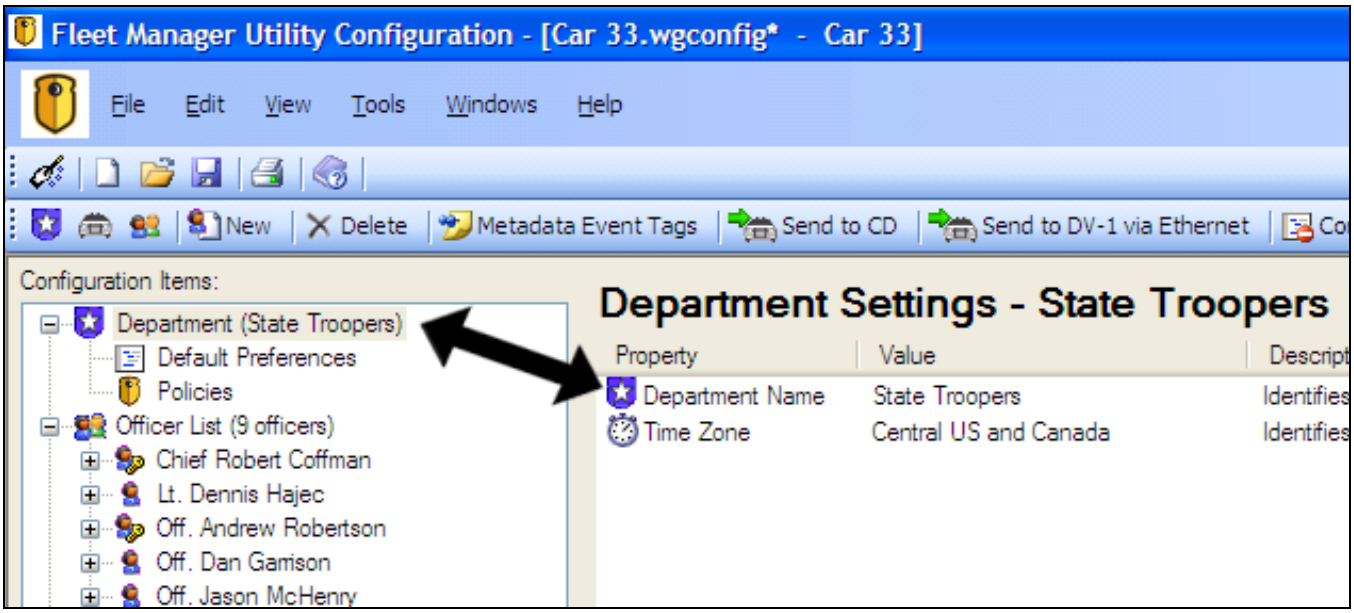


NOTICE
Time Saver Tip – Multiple Files on a Single Configuration CD: More than one configuration file can exist at the root folder of the CD. Burning multiple configuration files to the same CD is a flexible solution that can save time. That single CD can then be transported to all applicable vehicles, and the appropriate configuration file can be imported to each vehicle.

4.4 EDITING ADDITIONAL CONFIGURATION SETTINGS

The *'Getting Started' Configuration Wizard* discussed on page 17 assists in editing only the most common configuration settings. This section describes a high-level view of all configuration settings and how to edit them.

For a list of all factory default settings, see the tables in *Factory Default Settings* starting on page 32.



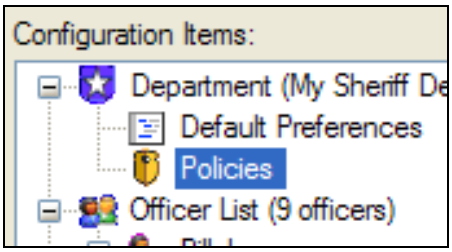
The pane on the left shows a hierarchical tree view of all configuration categories. Selecting a category or item in the left pane causes the appropriate information to display in the right pane. The **Department Name** and **Time Zone** settings are shown in the right pane since the Department category in the left pane is selected.

4.4.1 Department Policies

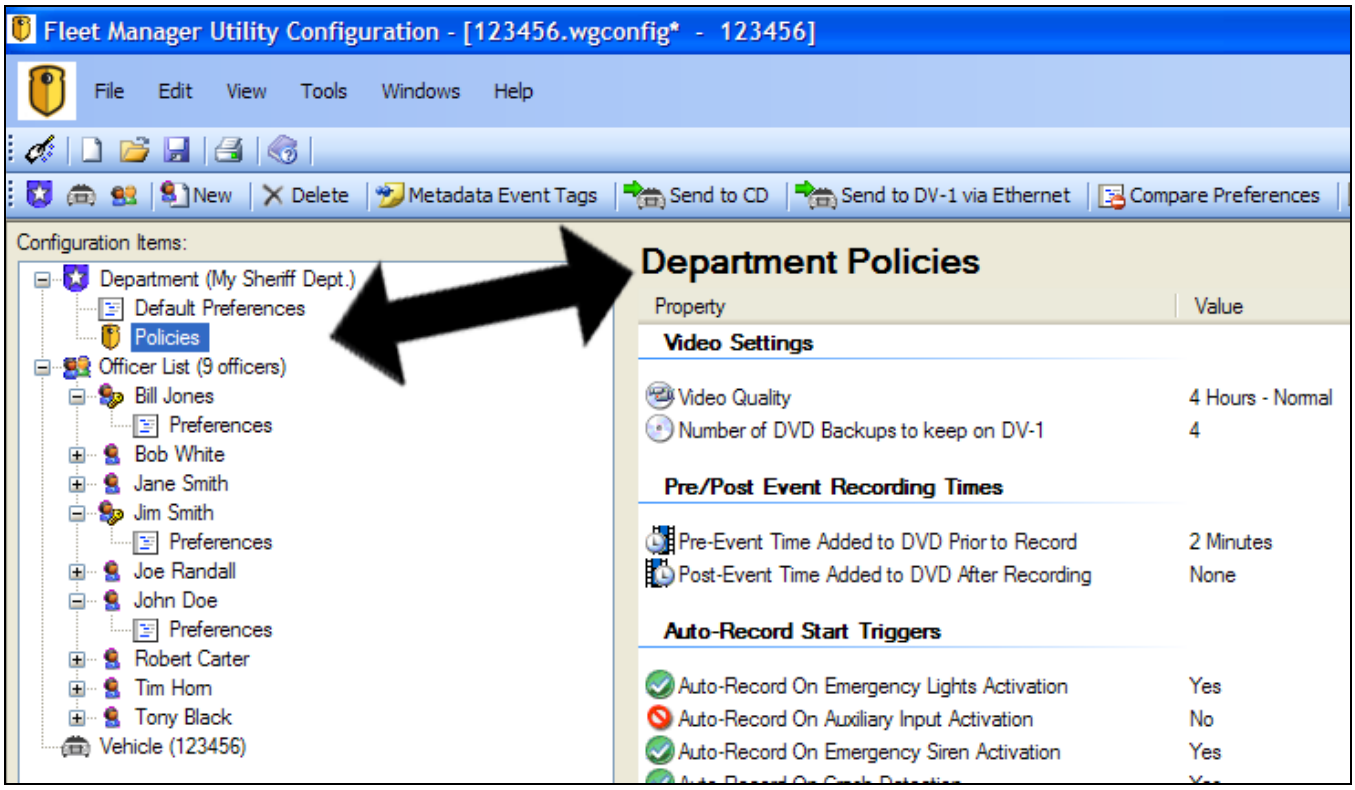
Department Policies are set once globally for the vehicle within a given configuration file. They include settings for such things as video quality, start triggers, microphone behavior, and permissions, to name a few.

Officers do not have settings for *Department Policies*. To set individual *Officer Preferences*, see *Department Default and Officer Preferences* on page 29

In the left pane, expand the **Department** item and select **Policies**.



The right pane displays policy settings for such things as Video Quality, Pre-Event Time Added to DVD Prior to Record, Auto-Record Start Triggers, etc.



Double-clicking a property in the right pane will, in many cases, bring up an editor dialog for that property; however, if double-clicking on a property containing only **Yes**/**No** values, the value is simply changed to the opposite value.

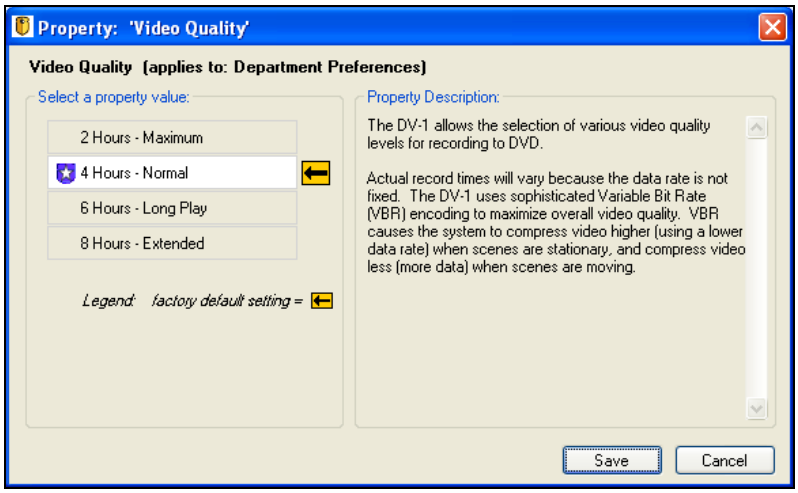
For example, double-click the **Video Quality** property.

The **Video Quality** editor dialog displays. Use the mouse to select one of the property values from the list on the left side. Note that the right side shows a detailed description of the given property.

The ⬅ indicates the factory default setting for the given property.

The icon indicates the current Department setting for the given property.

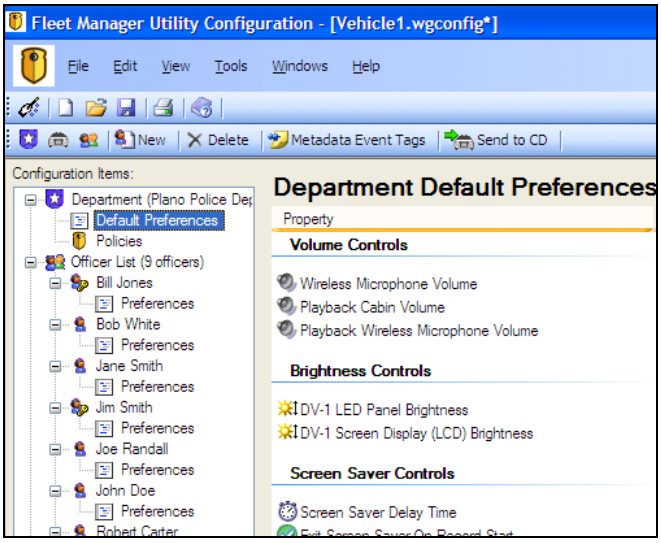
Click the **Save** button to save the changes, or **Cancel** to exit without saving changes.



4.4.2 Department Default and Officer Preferences

Each officer can have their own unique set of preferences that differ from the *Department Default Preferences*. When an officer name is added, a Preferences icon is created beneath the new officer name, indicating that each officer can have their own set of preferences. Anytime a new officer name is added to the configuration file, the new officer automatically inherits the *Department Default Preferences* as his or her own settings. The *Officer Preferences* remain the same as the *Department Default Preferences* unless changed.

First, ensure that the officer name is created as described in *'Getting Started' Configuration Wizard* on page 17, and then select the **Preferences** icon beneath the officer's name.

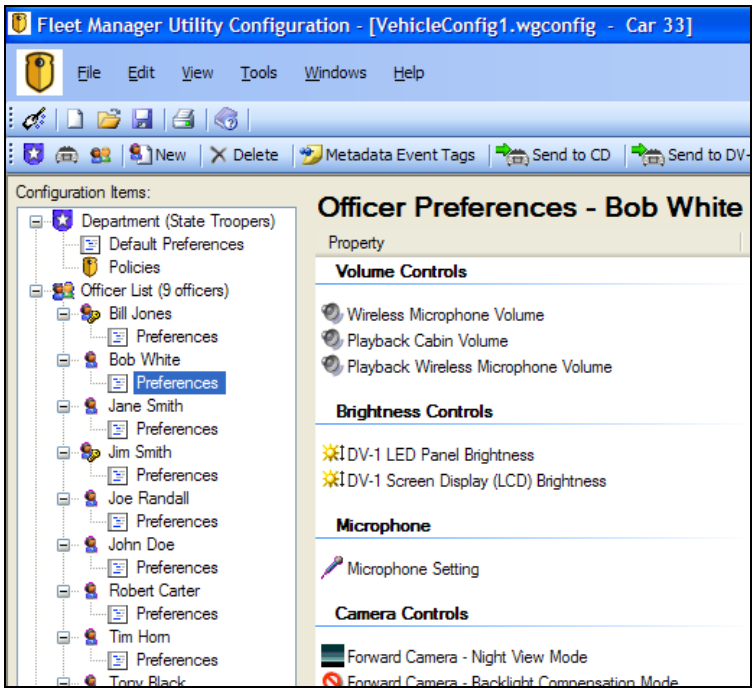


When the Preferences item is selected under an officer name, the same list of properties appears in the right pane as did appear when selecting the *Department Default Preferences* option.

Changing a property value for a given officer does not change the same property value in the *Department Default Preferences* (and vice-versa).

To give one or more officers the same setting for a particular property, one easy solution is to first change the Department value for that property and then drag/drop the property from the Department's right pane onto the Officer List (to apply to all officers), or onto a single officer name in the left pane.

See *Copying Configuration Settings* on page 38 for further details on copying Department settings to one or more officers.

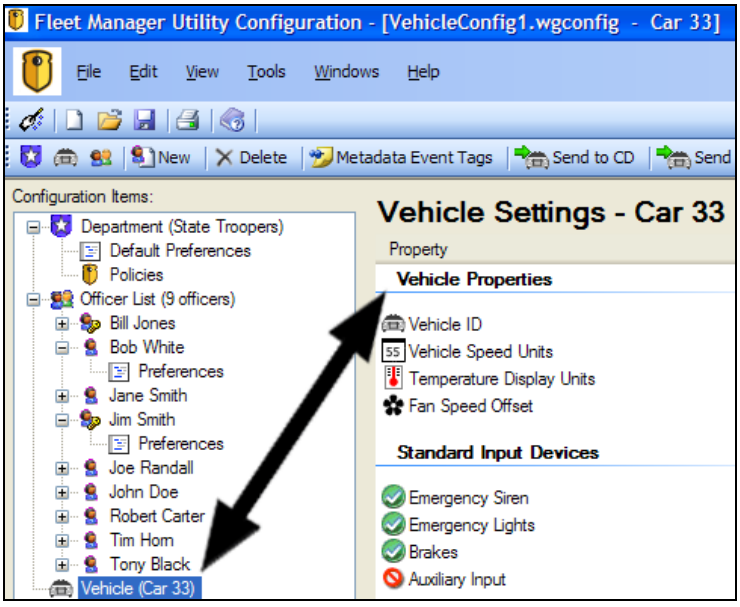


4.4.3 Vehicle Settings

Select the Vehicle icon in the left pane to display the **Vehicle Settings** on the right.

The first property displayed in the right pane is **Vehicle ID**, previously addressed in the *'Getting Started' Configuration Wizard* on page 17. If the configuration file will be used for any of the following purposes, it is recommended that the Vehicle ID field remain blank:

- The configuration file will be used as a *Master Template Configuration File* from which all other vehicle's configuration files will originate
- There is more than one DV-1 vehicle in the fleet, but only one configuration file will be used for all DV-1 vehicles. (In this case, set the Vehicle ID for each DV-1 manually after deploying the configuration file to each DV-1.)



For vehicle settings, the list on the right also includes the properties that manage the various input devices to the DV-1, e.g., emergency siren and brake light monitoring, radar systems, and GPS. Double-click on any of these list items to edit them or to learn more about the values available for each property.

There is only one instance of each vehicle setting in a given configuration file. Thus, an individual officer cannot have his or her own set of vehicle preferences.

4.5 FACTORY DEFAULT SETTINGS

The following tables show the Factory Default Settings from the *Fleet Manager Utility*.

Table 1 Department Default Preferences

Property	Value	Description
Wireless Microphone Volume	0 – OFF	Volume level when listening to live audio from wireless microphone when DV-1 is recording
Playback Cabin Volume	5	Playback volume level of cabin microphone when reviewing video on DV-1
Playback Wireless Microphone Volume	8	Playback volume level of wireless microphone when reviewing video on DV-1
DV-1 LED Panel Brightness	10 – MAX	Brightness level for the DV-1's backlit LED front panel buttons
DV-1 Screen Display (LCD) Brightness	5	Brightness level for the DV-1's LCD front panel screen
Microphone Setting	All Microphones Off	Determines which microphones are turned on
Forward Camera – Night View Mode	Auto	Increases overall light sensitivity at night
Forward Camera – Backlight Compensation Mode	No	Brightens overall exposure when a subject in foreground would otherwise appear dark due to strong backlighting
Forward Camera – Auto Zoom Hold Time	Hold tight zoom for 5 seconds	Amount of time for camera to stay in the tight zoom position when auto-zooming
Forward Camera – Auto Zoom Magnification Level	5 X Magnification	Zoom level for camera when auto-zooming
Forward Camera – Initial Zoom Magnification Level	1 X Magnification	Initial zoom level for camera on system startup
Rear Camera – Night View Mode	Off	Increases overall light sensitivity at night
Rear Camera - Backlight Compensation Mode	No	Brightens overall exposure when a subject in foreground would otherwise appear dark due to strong backlighting
Split Screen Display Settings	Forward Camera only	Select which camera feeds appear on the screen and also what video data is recorded to DVD video discs.
Screen Saver Wait Time	1 minute	Specifies how much idle time must elapse before the screen saver activates.
Screen Saver Exit On Record Start	True	Immediately exit screen saver mode when a recording begins.
Screen Saver Active While Recording	False	Can the system enter screen saver while a recording is active.

Table 2 Department Default Policies

Property	Value	Description
Video Quality	4 Hours - Normal	Choose a quality/resolution setting for video that is recorded to DVD
Number of DVD Backups to keep on DV-1	4	Identifies the number of DVD archive backups to keep on the DV-1's hard disk for burning duplicate DVDs after the fact
Pre-Event Time Added to DVD Prior to Record	2 Minutes	Add up to 10 minutes of previous video footage before a recorded event
Post-Event Time Added to DVD After Recording	None	Automatically add up to 10 minutes of post video footage after a recorded event
Automatically Turn DV-1 On When Vehicle Is On	Yes	Automatically power on the DV-1 when the vehicle is turned on
Automatically Turn DV-1 Off When Vehicle Is Turned Off	Yes	Automatically power off the DV-1 when vehicle is turned off
Allow DV-1 To Be Powered Off When Vehicle Is On	Yes	Allow officer to shut down the DV-1 while vehicle is on
Automatically Turn On Both Microphones When Record Begins	Yes	(1st and 2nd Generation DV-1) Automatically switches the wireless microphone on when the DV-1 begins recording
Allow Officers to Turn Off Microphones While Recording	Yes	(1st and 2nd Generation DV-1) Allow officer to turn off microphones while recording
Allow Officers to Turn Off Wireless Microphone While Recording	Yes	(3rd Generation DV-1) Allow officer to turn off wireless microphone while recording
Allow Officers to Turn Off Cabin Microphone While Recording	Yes	(3rd Generation DV-1) Allow officer to turn off cabin microphone while recording
Allow Officers to Turn On Wireless Microphone When Record Begins	Yes	(3rd Generation DV-1)Allow officer to turn on wireless microphone while recording
Allow Officers to Turn On Cabin Microphone While Recording	Yes	(3rd Generation DV-1) Allow officer to turn on cabin microphone while recording
Force Cabin Microphone On Even When Not Recording	No	Always force cabin microphone on even when not recording
Charge Wireless Microphone While System Off	Yes	Charge the wireless microphone while the system is turned off.
Allow Officers to Add/Delete/Edit Officer Names	Yes	Allow officer to add, delete, and edit any officer name information
Allow Officers to Edit Auto-Record Start/Stop Triggers	No	Allow officer to select which triggers will activate and/or end a recording
Allow Officers to Edit Camera Auto Zoom	Yes	Allow officer to change the auto-zoom sequence settings

Property	Value	Description
Allow Officers to Edit Which Text Fields Are Recorded	No	Allow officer to select which on-screen text fields will be included in a recording
Allow Officers to Edit DV-1 Date and Time	Yes	Allow officer to set/edit the date and time on the DV-1
Allow Officers to Edit Vehicle ID	Yes	Allow officer to add/edit the vehicle identification number
Allow Officers to Edit Video Quality	No	Allow officer to set the level of DVD video quality for the recording
Allow Officers to Edit Input Devices	No	Allow officer to adjust settings for input devices
Allow Officers to Edit Pre/Post Event Recording Times	No	Allow officer to select times for Pre and Post Event recording settings
Allow Officers to Edit Department Name	No	Allow officer to enter/edit the department name
Allow Officers to Reuse DVD Discs Without Entering Supervisor Password	No	Allow officer to reuse a DVD disc without supplying a supervisor password
Allow Officers to Burn Archive Copy of DVD Without Entering Supervisor Password	No	Allow officer to burn an archive copy of a DVD without supplying a supervisor password
Close the current DVD on eject	No	Close the current DVD on eject
Video Review Access Levels	Officer, Officer, Officer, Officer	Access levels required to review video
Auto-Record On Emergency Lights Activation	Yes	Start recording automatically when the emergency lights are activated
Auto-Record On Auxiliary Input Activation	No	Start recording automatically when the auxiliary device is activated
Auto-Record On Emergency Siren Activation	Yes	Start recording automatically when the emergency siren is activated
Auto-Record On Crash Detection	Yes	Start recording automatically when a patrol vehicle crash is detected. (May not be available on all DV-1 systems.)
Auto-Record On Wireless Microphone Activation	Yes	Start recording automatically when the wireless microphone is activated
Metadata Event Tags	No tags defined	Defines extra metadata tags that can be added to a record event by the in-car officer for a given traffic stop.
Auto-Record Stop Trigger	5 minutes - Stop when start triggers inactive for 5 minutes	Stop recording automatically after a given period of inactive time transpires
Auto-Record Stop Trigger Confirmation Prompt	Yes	Confirm before automatically stopping during a record event

Property	Value	Description
DV-1 Screen - Display Text Fields Master Switch	Yes	Global DV-1 setting that determines whether to display on-screen text on the DV-1 screen but has no impact on what is recorded to DVD
DV-1 Screen - Display Disc Usage	Yes	Determines whether the DVD disc usage bar is displayed on the DV-1 screen
Record to DVD - Auxiliary Status	No	Determines whether input from auxiliary device is recorded to DVD
Record to DVD - Officer Name	Yes	Determines whether selected officer name is recorded to DVD
Record to DVD - Patrol Vehicle ID	Yes	Determines whether vehicle ID is recorded to DVD
Record to DVD - Time and Date	Yes	Determines whether time/date is recorded to DVD
Record to DVD - Crash Detection	Yes	Determines whether crash detection is recorded to DVD
Record to DVD - Brakes Status	Yes	Determines whether input from brakes is recorded to DVD
Record to DVD - Department Name	Yes	Determines whether department name is recorded to DVD
Record to DVD - Lights and Siren Status	Yes	Determines whether input from lights and siren is recorded to DVD
Record to DVD - GPS Coords	No	Determines whether GPS coordinates are recorded to DVD
Record to DVD - Radar Speeds	No	Determines whether radar speeds are recorded to DVD

Table 3 Vehicle Default Preferences

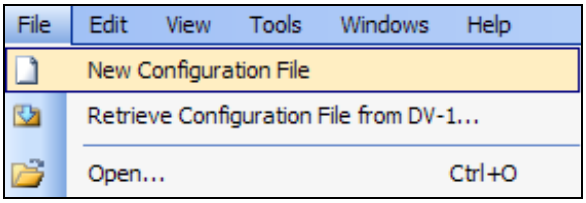
Property	Value	Description
Vehicle ID		Unique text identifier for the vehicle
Vehicle Speed Units	MPH (miles per hour)	Vehicle speed sensor speed display units
Temperature Display Units	Fahrenheit	Choose the preferred setting for how temperature is displayed.
Fan Speed Offset	0	Choose the preferred setting for the relative fan speed offset. The larger the value, the faster the fan speed.
Emergency Siren	Yes	Monitor input from the emergency siren
Emergency Lights	Yes	Monitor input from the emergency lights
Brakes	Yes	Monitor input from the vehicle brakes
Auxiliary Input	No	Monitor input from the auxiliary input device

Property	Value	Description
Crash Sensitivity	Medium	If applicable for your hardware, select the crash sensitivity setting for the DV-1.
Global Positioning System (GPS) Type	None	If applicable for your hardware, select the type of global positioning system (GPS) for the DV-1.
Display GPS Speed	Yes	Determines whether GPS speed is displayed
Radar Type	None	Optionally choose the type of radar used by the system
Radar Display Fast Lock Speeds	Yes	Determines whether speed of fastest vehicle in a group of cars is displayed and whether the locked vehicle speed of the radar is displayed
Radar Display Patrol Speed	Yes	Determines whether speed of patrol vehicle is displayed
Radar Display Target Speeds	Yes	Determines whether speed of target vehicles is displayed

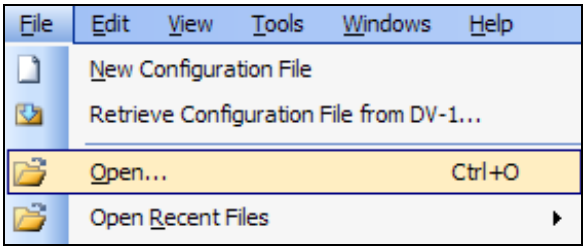
4.6 CREATING AND OPENING MULTIPLE CONFIGURATION FILES

The *FMU* can create and manage more than one configuration file at a time, allowing settings from one file to be copied to another.

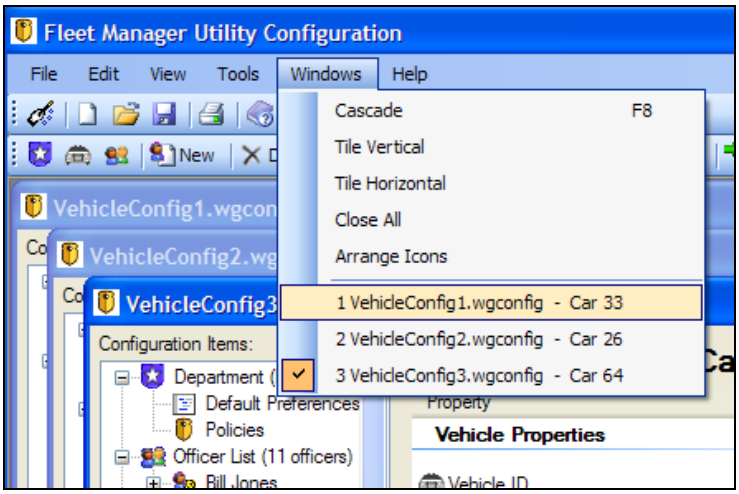
Select **File** > **New Configuration File** to create multiple files one at a time. The default filename, **`VehicleConfig1.wgconfig`** is incremented by one each time this option is selected.



Select **File** > **Open** to open multiple configuration files.



To switch between the open files, select the **Windows** menu on the main screen and select the desired file.



4.7 USING A MASTER TEMPLATE CONFIGURATION FILE

If most or all of the fleet's DV-1 devices have many of the same settings, create and maintain a *Master Template Configuration File.* Use this template file to store some of the most common Officer and Department settings, and then use this file as a basis for newly created configuration files. See *DV-1 Configuration Strategies* on page 15 for help in deciding the best strategy for your Department.

For example, when a new vehicle is outfitted with a DV-1 system, make a copy of the template file, rename it appropriately for the new vehicle, and customize properties that are specific to the new vehicle. To deploy the configuration file to the new vehicles's DV-1, open the new file as well as the template file, and then copy/paste (or drag/drop) the applicable settings from the template file to the new file. This ensures that the new file is synchronized with the standard Officer and Department settings as configured in the template file.

See *Copying Configuration Settings* on page 38 for details on copying settings within the same or different configuration files.

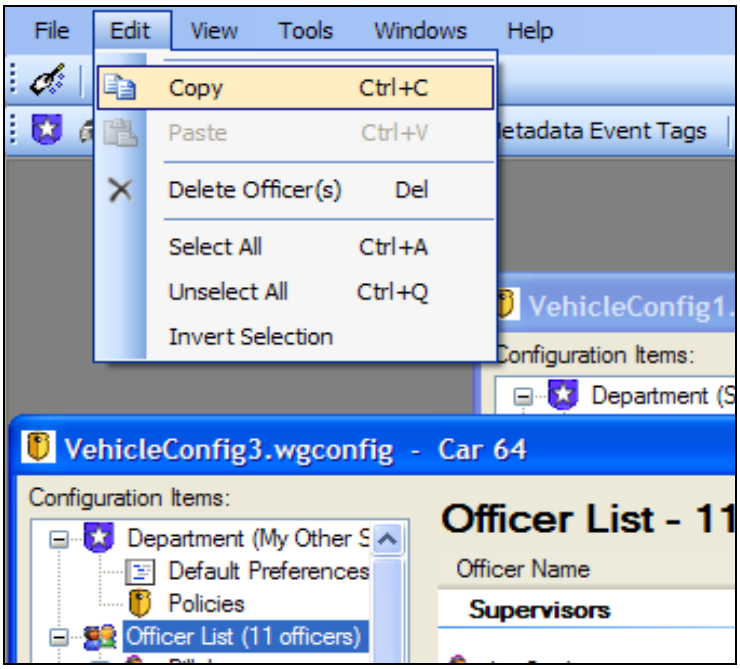
4.7.1 Copying Configuration Settings

Officer Preferences and *Department Default Preferences* can be copied from one configuration file to another by using either the copy/paste or the drag/drop method. Each configuration file is independent of the content in any other file. It is important to keep the files synchronized if they are to contain matching configuration settings.

4.7.1.1 Copy Officer List to New Configuration File

In this example, we use the copy/paste method to copy the entire Officer List from the **`VehicleConfig3.wgconfig`** (source) file to the **`VehicleConfig1.wgconfig`** (destination) file.

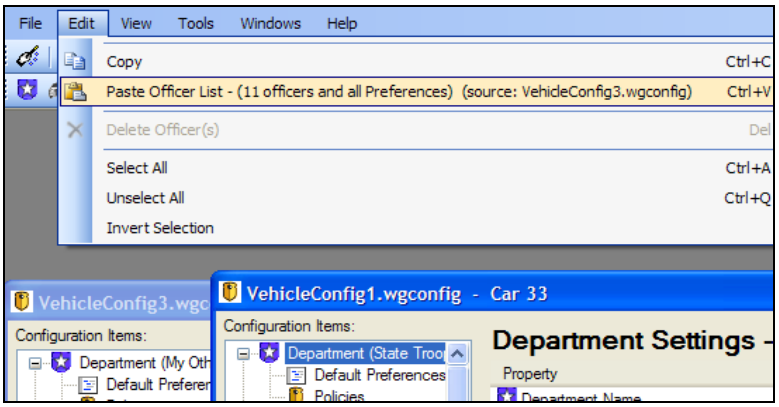
First, ensure that both the source and destination files are open. Highlight the Officer List item in the **`VehicleConfig3.wgconfig`** (source) file, and select **Edit** > **Copy**. Alternatively, right-click the Officer List item and select **Copy**.



From the **`VehicleConfig1.wgconfig`** (destination) file, select **Edit** > **Paste Officer List**. (The **Paste** option displays the number of officers being copied as well as the name of the source file.)

The **`VehicleConfig1.wgconfig`** (destination) file now contains the same Officer List as the source file.

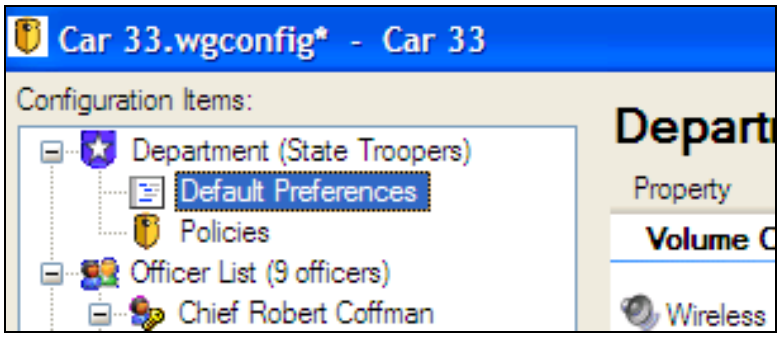
To achieve the same results using the drag/drop method, simply drag the Officer List from the source file into the destination file.



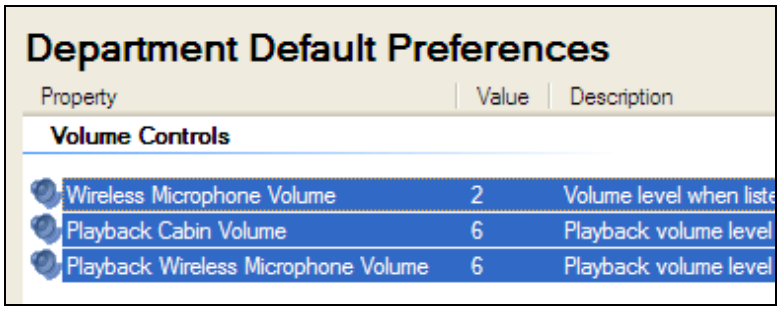
4.7.1.2 Copy Department Preferences to One or More Officers

In addition, one or more properties can be copied and pasted to the entire Officer List or to a single officer name.

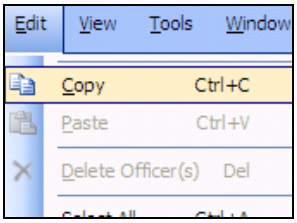
For example, to copy the Department's volume preferences to one or more of the officers, first select the *Department Default Preferences*.



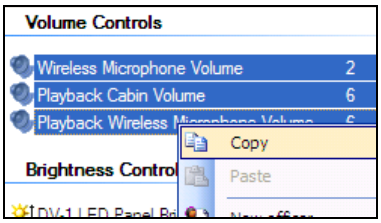
From the right pane, select the desired properties (hold down the *Ctrl* key on the keyboard to select multiple).



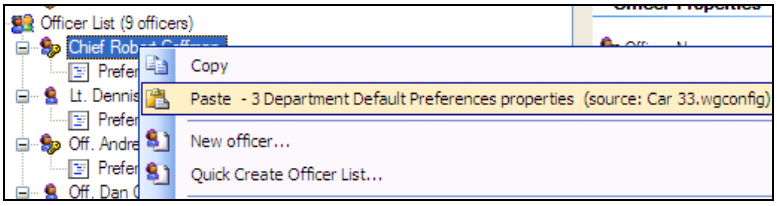
Select **Edit** > **Copy** (or right-click within the selection area and select **Copy**).

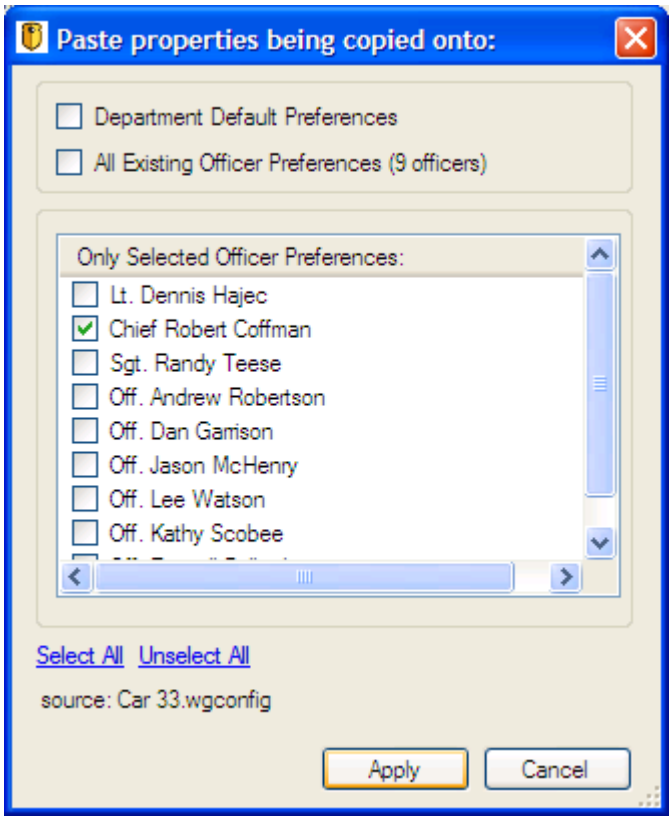


or



To paste to a single officer, right-click the officer name and select **Paste**.





A check appears to the left of the desired officer name. At this time, additional officer names may be selected, or simply click **Apply** to apply the settings to the selected officer.

The selected officer has now inherited the 3 *Department Default Preferences* for volume control.

NOTICE
If using the **Select All** option, the checkbox for *Department Default Preferences* is automatically selected, and the Department's settings will be overwritten.

5 Metadata Event Tags

5.1 EVENT TAG DEFINITION

Event tags are defined in the *FMU* and loaded into the DV-1 on a configuration CD. When a DV-1 recording is ended, the in-car officer is prompted to provide additional details of the event that just occurred. Some examples of event tags are Event Category, Ticket Number, *Is the event critical evidence?*, License Plate Number, etc.

There are 2 types of event tags:

- **Dropdown List** – The in-car officer selects from a list of answers when prompted with a question.
- **Text Field** – The in-car officer enters the answer in a text box; can be restricted to alphanumeric or numeric characters.

Event tags can be configured as follows:

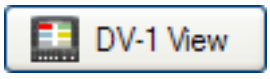
- **Required** – Must enter an answer to continue
- **Optional** – Answer is not required; the in-car officer can either manually skip these, or the screen automatically advances if the event tag has a timeout configured.
- **Hidden** – Creates a non-editable default event tag that is never displayed to the in-car officer on the screen, but it is written to the DVD for each recording. This option is only available for **Text Field** event tags.

5.2 SPECIAL SCREEN ICONS

The following is a list of some of the icons you may encounter as you are entering and editing event tags:

Print icon – Opens a page in your default browser, enabling you to print a list of either the available or the configured event tags

DV-1 View icon – Displays a representation of what the resulting screen will look like on the DV-1 with the configured event tag



Add Wizard icon – Runs the Add Wizard

Edit Wizard icon – Runs the Edit Wizard

Info icon – Displays help on a specific field or option

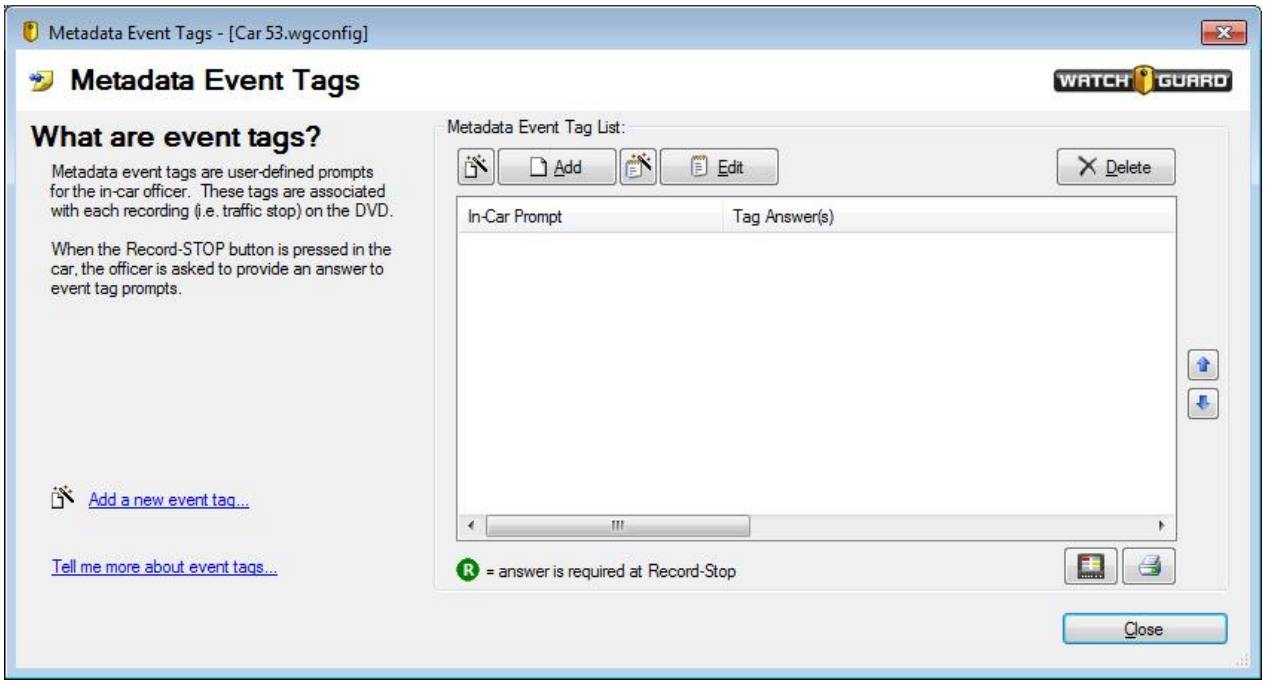
Event Tag Order – Use the blue arrows to change the order of created event tags. See *Changing the Order of Event Tags* on page 52 for further details.

Field name in use icon – Shows you which metadata event tags you have already selected for the current configuration file

5.3 EVENT TAGS MAIN SCREEN

From the main screen, click the **Metadata Event Tags** button from the toolbar at the top.

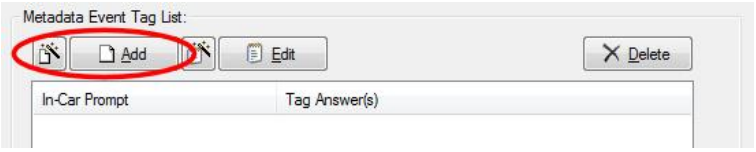
The **Metadata Event Tags** screen displays.



5.4 ADDING EVENT TAGS

When adding event tags, you have the choice of using either the *Wizard* or the *Editor*. The Editor allows you to create the tags from scratch, whereas the Wizard has built-in prompts and answers for commonly used event tags.

From the *Event Tags Main Screen*, add an event tag using the **Editor** by clicking either the **Add** button at the top.



Or, add an event tag using the **Wizard** by clicking either the icon next to the **Add** button at the top.

The **Create New MetaData Event Tag** screen displays.

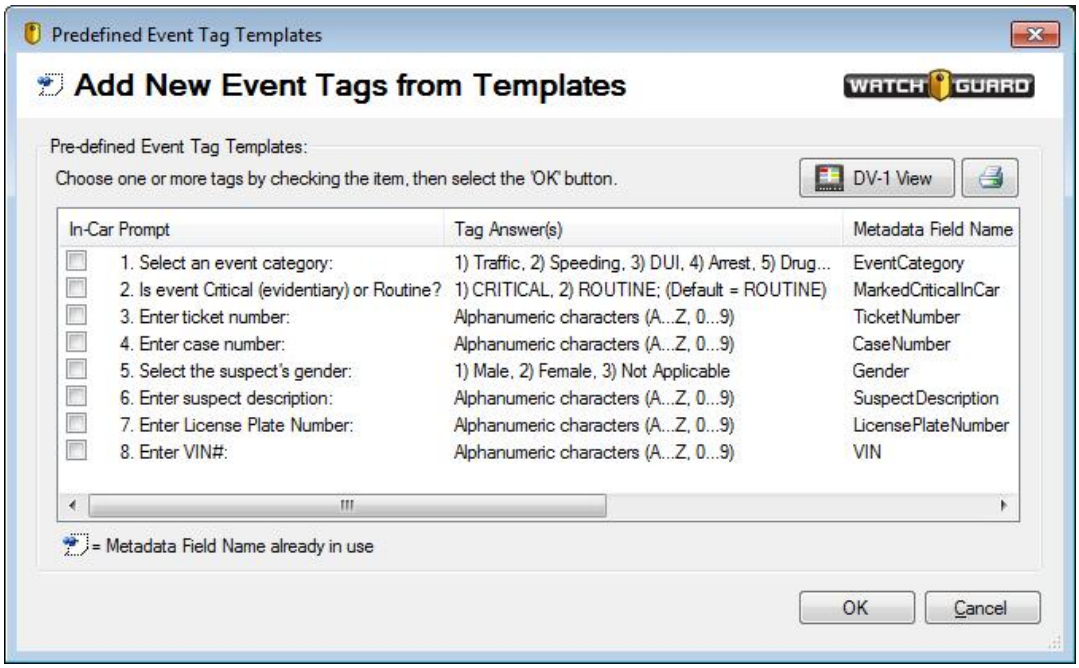
NOTICE
In the following examples, Editor screen shots are used instead of the Wizard for simplicity purposes. The Wizard works in much the same way as the Editor, except that the Wizard screens are broken down into steps. However, all options are identical.

5.4.1 Pre-Defined Event Tag Templates

Whether using the Editor or the Wizard, the **Pre-defined event tag templates** provide some of the most common prompts and tag answers without having to enter them manually.

Click the **Pre-defined event tag templates** link.

The **Add New Event Tags from Templates** screen displays.



NOTICE
A maximum of 6 event tags can be configured, either all at once, or one at a time. However, to demonstrate the two types of event tags, two examples are provided: one for adding a **Dropdown List** event tag, and the second for adding a **Text Field** event tag.

5.4.1.1 Adding a Pre-Defined Dropdown List Event Tag

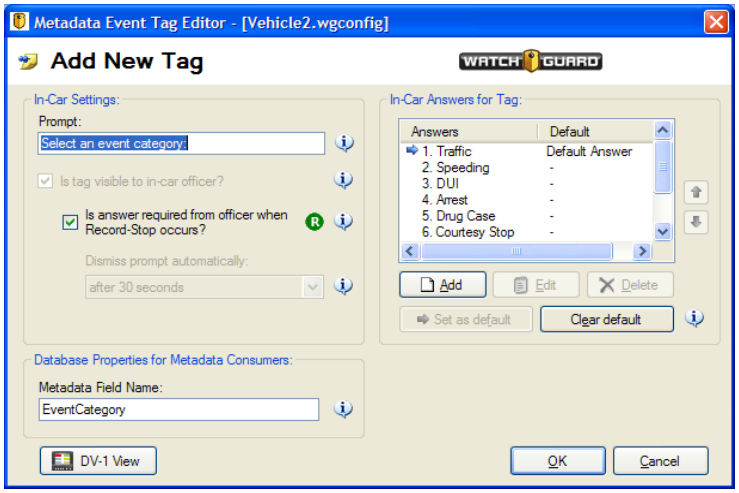
For this example, we are using **Event Tag Template Item #1: Select an event category**. This is a **Dropdown List** event tag, which allows the in-car officer to select from a list of answers when prompted with a question.

From the **Add New Event Tags from Templates** screen, select the checkbox for **Prompt #1** and click **OK.**

The **Add New Tag** screen displays. Because we have selected a pre-defined template, the **Prompt** and the **Answers** are already filled in for you.

The ➡ indicates the default answer for this event tag. To change the default answer, highlight the answer you want, and click the **Set as default** button. To clear the default value, click the **Clear default** button.

A **Metadata Field Name** is already filled in for you. This field name identifies the event tag. You may change it if you want.

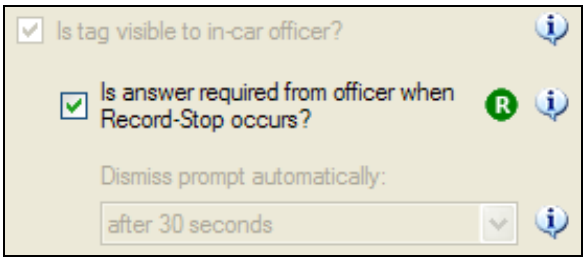


NOTICE

If you're using or intend to use WatchGuard's *Video Evidence Library* to manage your video storage, it is important to develop and use a consistent naming scheme for **Metadata Field Names**.

The default **In-Car Settings** for this pre-defined **Dropdown List** event tag are:

- **Visible to the in-car officer** – List fields are always visible, so this option is dimmed. Only text fields can be hidden. (See *Creating a Non-Editable Default Tag* on page 51 for information on creating a hidden text field.)
- **Required** – The in-car officer is required to enter an answer to the prompt. (See *Making an Answer Required or Optional* on page 51 for further details.)
- **Prompt not dismissed** – The prompt remains on the DV-1 screen as long as it takes for the in-car officer to enter an answer.

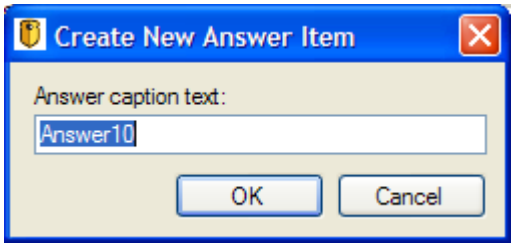


NOTICE

The above **In-Car Settings** options are for this particular pre-defined event tag. Each pre-defined event tag may have its own default settings, and they are not necessarily the default when manually creating a new tag of that type.

For this example event tag, there are 9 possible answers already added for you. If you wish to add more answers to the list, click the **Add** button and input a new one. The maximum number of answers allowed is 15.

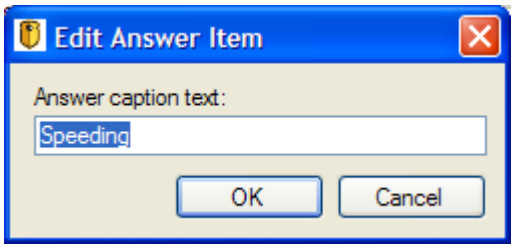
Click **OK** when done.



To edit an existing answer, highlight the answer and click the **Edit** button. Input the modification and click **OK**.

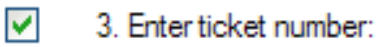
To delete an answer, highlight it and click the **Delete** button, then click **Yes** to confirm.

Click **OK** when done.



5.4.1.2 Adding a Pre-Defined Text Field Event Tag

For this example, we are using **Event Tag Template Item #3: Enter ticket number:**. This is a **Text Field** event tag, which allows the in-car officer to manually input the answer when prompted.



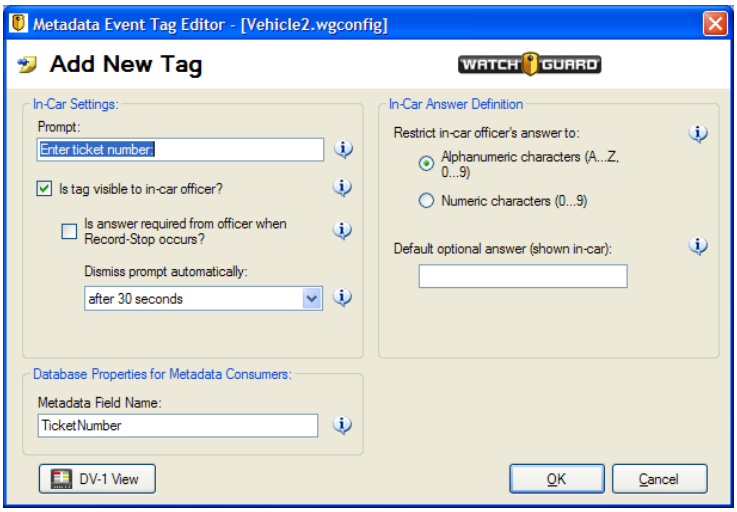
From the **Add New Event Tags from Templates** screen, select the checkbox for **Prompt #3** and click **OK.**

The **Add New Tag** screen displays. Because we have selected a pre-defined template, the **Prompt** is already filled in for you.

Alphanumeric is the default selection for the type of characters that the in-car officer can enter. Change to **Numeric** if applicable.

If desired, enter a **Default optional answer** to be displayed for the in-car officer. This can save the in-car officer some time if the answer is frequently going to be the same. The answer is editable by the in-car officer, if necessary.

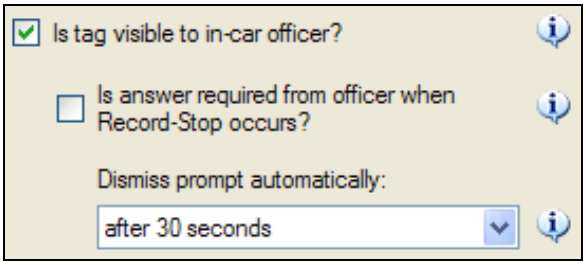
A **Metadata Field Name** is already filled in for you. This field name identifies the event tag. You may change it if you want.



NOTICE
If you're using or intend to use WatchGuard's *Video Evidence Library* to manage your video storage, it is important to develop and use a consistent naming scheme for metadata field names.

The default **In-Car Settings** for this pre-defined **Text Field** event tag are:

- **Visible to the in-car officer** – The DV-1 will display the prompt to the in-car officer when the **STOP/QUIT** key is pressed. (See *Creating a Non-Editable Default Tag* on page 51 for information on creating a hidden text field.)
- **Optional** – The in-car officer will not be required to enter an answer to the prompt. (See *Making an Answer Required or Optional* on page 51 for further details.)
- **Prompt is dismissed** – When there is no response from the in-car officer after 30 seconds, the prompt is dismissed and the screen advances.

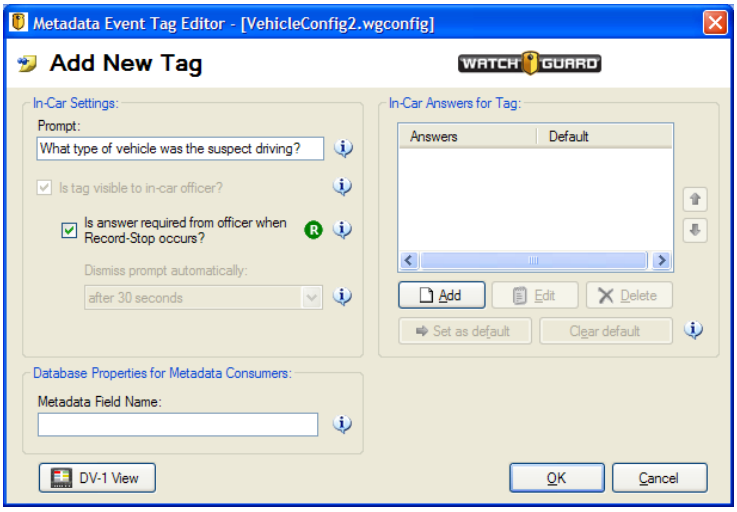


Click **OK** when done.

NOTICE
The above **In-Car Settings** options are for this particular pre-defined event tag. Each pre-defined event tag may have its own default settings, and they are not necessarily the default when manually creating a new tag of that type.

5.4.2 Manually Adding a Dropdown List Event Tag

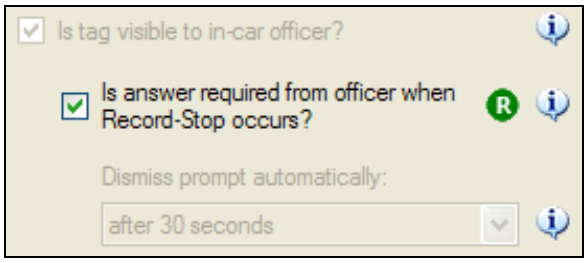
This section describes how to manually create a **Dropdown List** event tag. From the **Create New MetaData Event Tag** screen shown in *Adding Event Tags* on page 43, click the **Selectable answers in a dropdown list** link.



The **Add New Tag** screen displays.

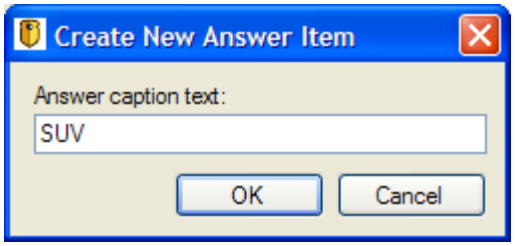
Type in the name of the prompt for the event tag. For this simple example, we have typed in **What type of vehicle was the suspect driving?**

The default **In-Car Settings** for a **Dropdown List** event tag are:



- **Visible to the in-car officer** – List fields are always visible, so this option is dimmed. Only text fields can be hidden. (See *Creating a Non-Editable Default Tag* on page 51 for information on creating a hidden text field.)
- **Required** – The in-car officer is required to enter an answer to the prompt. (See *Making an Answer Required or Optional* on page 51 for further details.)
- **Prompt not dismissed** – The prompt remains on the DV-1 screen as long as it takes for the in-car officer to enter an answer.

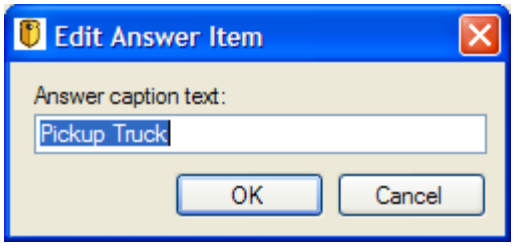
To add a list of answers that the in-car officer can choose from, click the **Add** button. Input the first answer and click **OK**.



For this example, we are inputting **SUV**, **Minivan**, **Pickup Truck**, **2 Door Compact**, and **4 Door Sedan**.

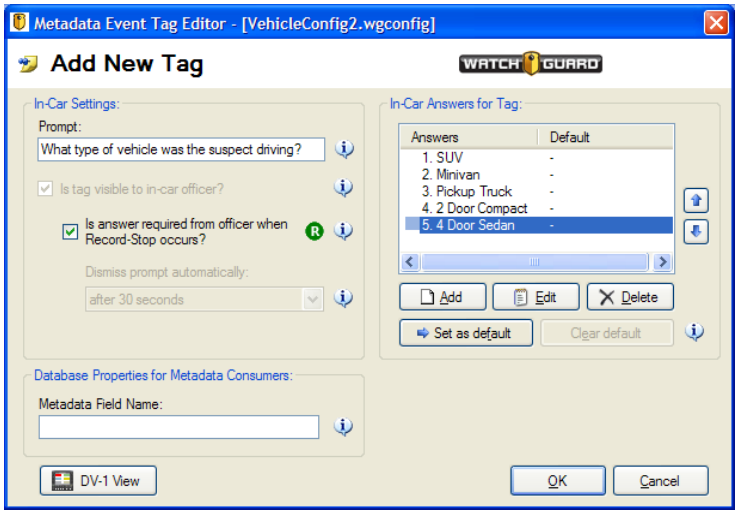
Continue adding answers in this manner. The maximum number of answers allowed is 15.

To edit an existing answer, highlight the answer and click the **Edit** button. Input the modification and click **OK**.



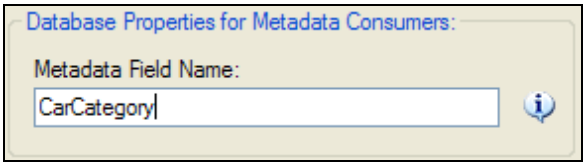
To delete an answer, highlight it and click the **Delete** button, then click **Yes** to confirm.

Once the above example answers are added, the screen will look like the one on the right.



Enter a **Metadata Field Name** to identify the event tag.

Click **OK** when done.

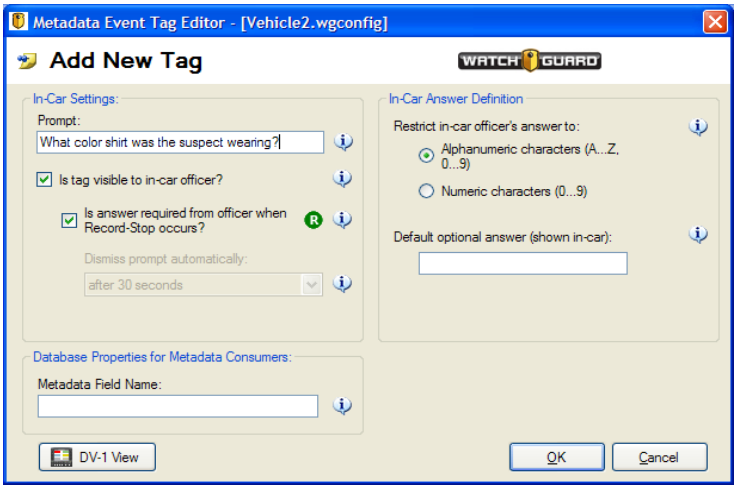


NOTICE
If you're using or intend to use WatchGuard Video's *Evidence Library* to manage your video storage, it is important to develop and use a consistent naming scheme for metadata field names.

5.4.3 Manually Adding a Text Field Event Tag

This section describes how to manually create a **Text Field** event tag. From the **Create New MetaData Event Tag** screen shown in *Adding Event Tags* on page 43, click the **Text field answer** link.

The **Add New Tag** screen displays.

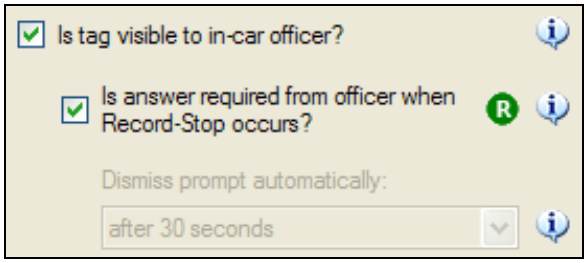


Type in the name of the prompt for the event tag. For this simple example, we have typed in **What color shirt was the suspect wearing?**

Select **Alphanumeric** or **Numeric** to restrict the type of characters that the in-car officer can enter.

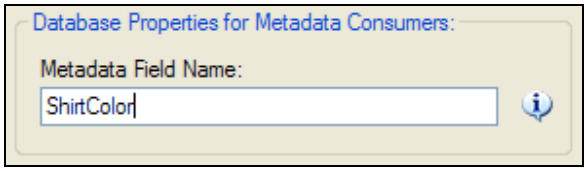
If desired, enter a **Default optional answer** to be displayed for the in-car officer. This can save the in-car officer some time if the answer is frequently going to be the same. The answer is editable by the in-car officer, if necessary.

The default **In-Car Settings** for a **Text Field** event tag are:



- **Visible to the in-car officer** – The DV-1 will display the prompt to the in-car officer when the **STOP/QUIT** key is pressed. (See *Creating a Non-Editable Default Tag* on page 51 for information on creating a hidden text field.)
- **Required** – The in-car officer is required to enter an answer to the prompt. (See *Making an Answer Required or Optional* on page 51 for further details.)
- **Prompt not dismissed** – The prompt remains on the DV-1 screen as long as it takes for the in-car officer to enter an answer.

Enter a **Metadata Field Name** to identify the event tag.



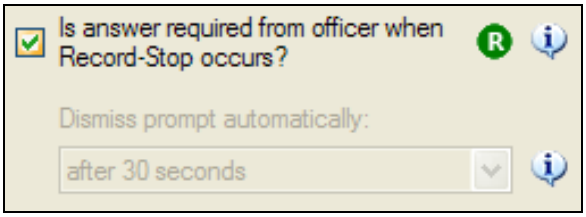
Click **OK** when done.

NOTICE
If you're using or intend to use WatchGuard's *Video Evidence Library* to manage your video storage, it is important to develop and use a consistent naming scheme for metadata field names.

5.4.4 Making an Answer Required or Optional

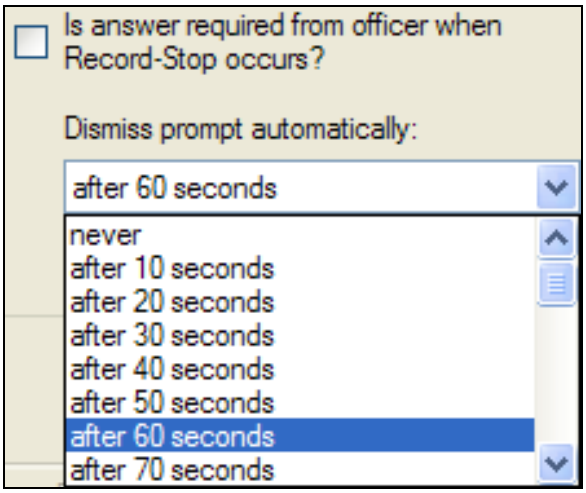
To make the in-car officer's response required, check the box **Is answer required from officer when Record-Stop occurs?**

This also disables the timeout period from the **Dismiss prompt automatically** pull-down menu.



To make the in-car officer's response optional, uncheck the box **Is answer required from officer when Record-Stop occurs?**

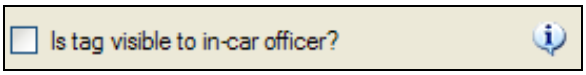
This also enables a timeout period to be configured from the **Dismiss prompt automatically** pull-down menu.



5.4.5 Creating a Non-Editable Default Tag

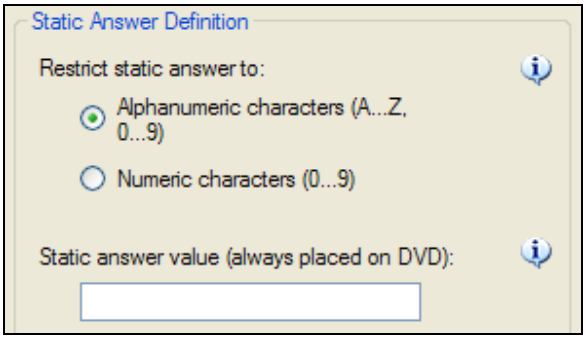
When the **Is tag visible to in-car officer?** checkbox is not checked, the event tag will never be displayed to the in-car officer, and a static default answer will always be written to the DVD.

This option can only be turned off for **Text Field** event tags.



Select **Alphanumeric** or **Numeric** to restrict the type of characters that can be entered into the static answer box.

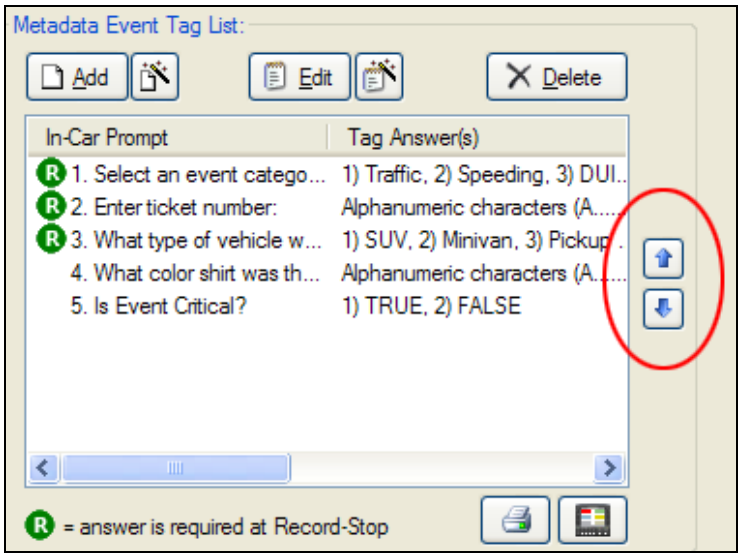
Enter a **Static answer value** in the text box. This value will always be written to the DVD.



5.5 CHANGING THE ORDER OF EVENT TAGS

When event tags are added, the Required tags automatically move to the top of the tag list since all Required tags must be presented to the in-car officer before Optional tags.

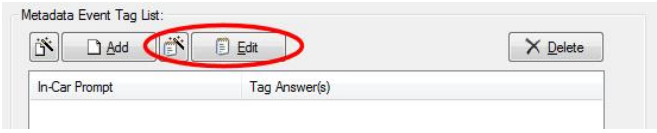
If you want to change the order of the event tags, you may use the blue arrows on the right of the main event tag screen; however, you will receive an error message if you try to move an Optional tag above a Required.



5.6 EDITING EVENT TAGS

The steps for editing an event tag are very similar to adding them. Just as when adding event tags, you have the choice of using either the Wizard or the Editor.

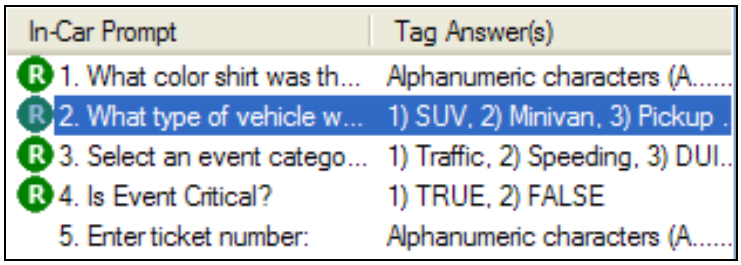
From the *Event Tags Main Screen*, edit an event tag using the **Editor** by highlighting the event tag to edit and clicking the **Edit** button at the top.



Or, edit an event tag using the **Wizard** by highlighting the event tag to edit and clicking the icon next to the **Edit** button at the top.

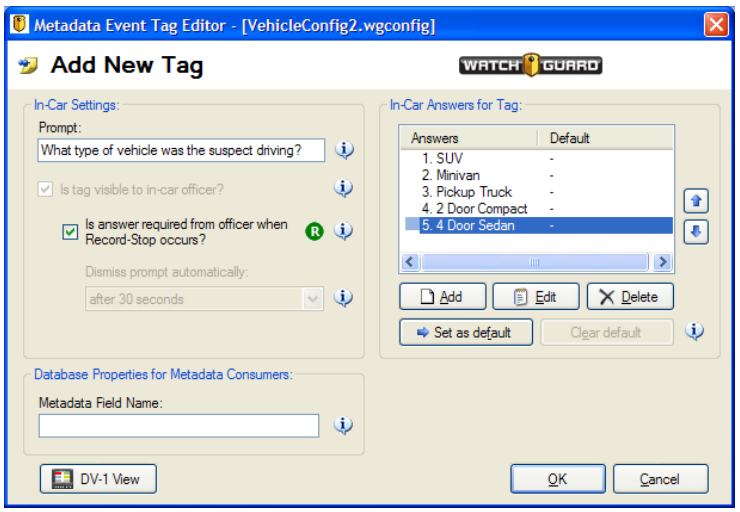
NOTICE
In the following example, Editor screen shots are used instead of the Wizard for simplicity purposes. The Wizard works in much the same way as the Editor, except that the Wizard screens are broken down into steps. However, all options are identical.

For this example, we are editing the **Dropdown List** event tag with the prompt, **What type of vehicle was the suspect driving?** We will add **Limousine** as a selection for the in-car officer.



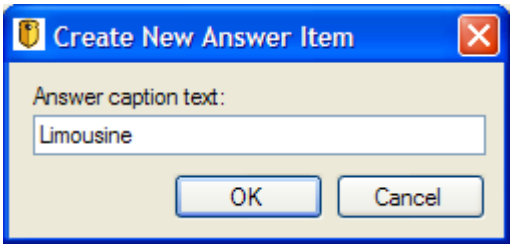
As described above, highlight the event tag you wish to edit, and click either the **Edit** button or the **Editor** link.

The **Metadata Event Tag Editor** screen displays the event tag settings.



Click the **Add** button.

Type in **Limousine** and click **OK** to add this as a choice.



Continue making any other necessary changes to this event tag, and click **OK** when done.

NOTICE
Only one example of the editing capabilities has been shown because editing is very similar to adding an event tag. See *Adding Event Tags* on page 43 for further details.

This page intentionally left blank.

6 Maintenance and Diagnostics

6.1 MAINTENANCE AND DIAGNOSTICS OVERVIEW

The *FMU* includes a *Maintenance and Diagnostics* mode for troubleshooting certain DV-1 scenarios. Under normal circumstances, most customers do not need to concern themselves with this functionality; however, if directed to do so by WatchGuard Customer Service, then a customer may be asked to run the *Fleet Manager Utility* in order to perform various maintenance and/or diagnostics tests.

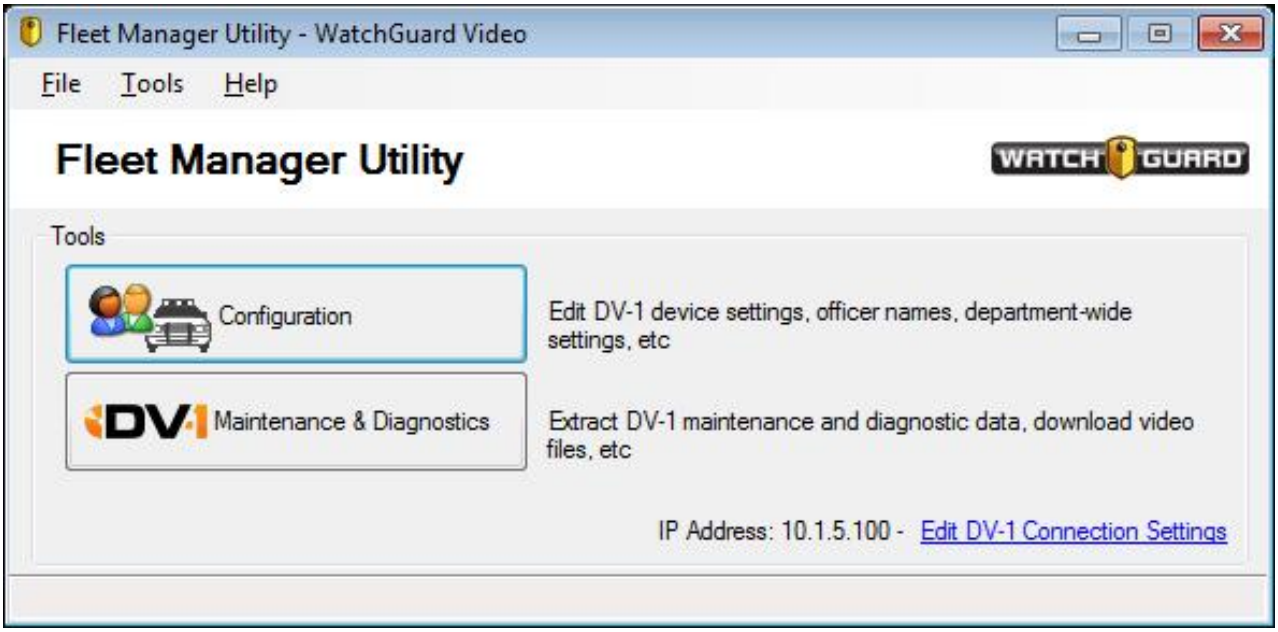
NOTICE
The *FMU*'s *Maintenance and Diagnostics* mode requires that the computer and the DV-1 be connected via an Ethernet/network cable. See *Ethernet Connection to the DV-1* on page 63 for information on how to make this connection.

There are three major areas of information available in *Maintenance and Diagnostics* mode:

- DV-1 system, software, and process information. (This information is of little interest to customers but can be of great use to WatchGuard Customer Service for troubleshooting purposes.)
- A list of all the video files stored on the DV-1's hard drive, allowing a customer to review the list and download selected video files to the PC
- A list of all *lost and found* files stored on the DV-1's hard drive

6.2 DIAGNOSTIC SESSIONS

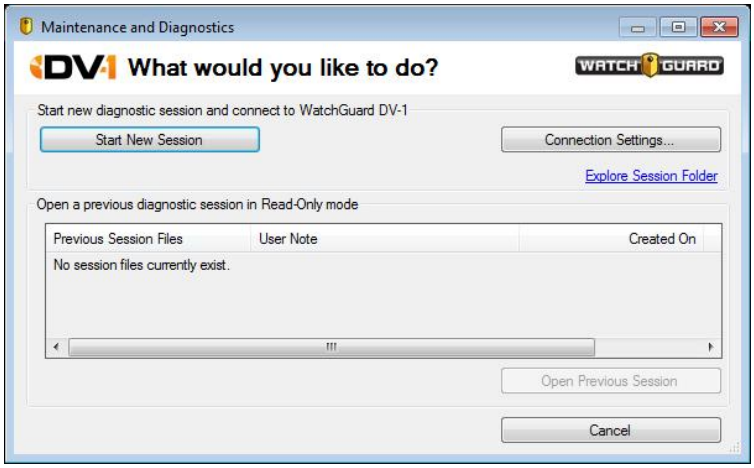
Each time the *FMU* enters *Maintenance and Diagnostics* mode, it treats each occurrence as a *diagnostic session* and assigns a unique one-up number. Operators should be familiar with the current diagnostics session number each time they connect to a DV-1 in order to track certain noteworthy events and associate those events with that session number.

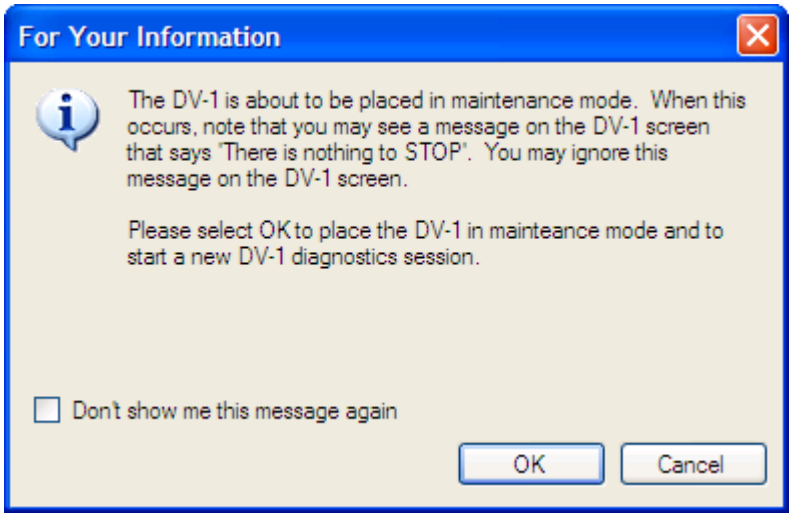


From the opening screen shown above, click the **Maintenance and Diagnostics** button.

The **Maintenance and Diagnostics** screen displays.

To start a new diagnostic session, click the **Start New Session** button.

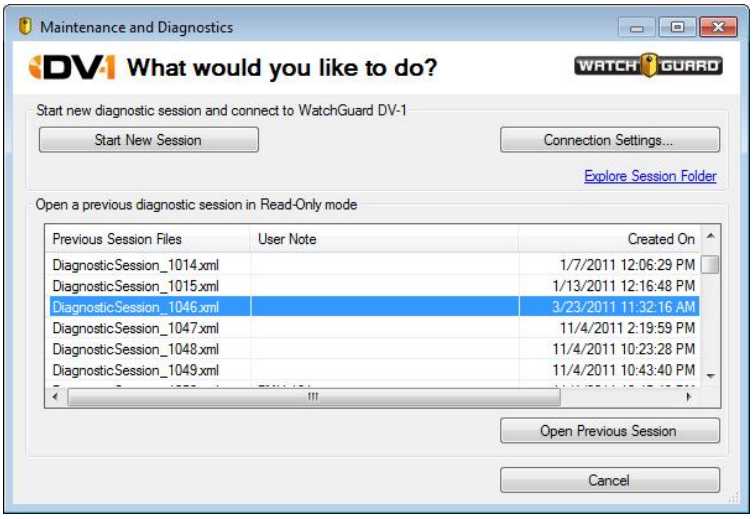




A note informs the operator of a message that may show on the DV-1 screen.

If desired, check the **Don't show me this message again** checkbox so that this message won't display again in the future.

Click **OK**.



If diagnostic sessions already exist, the screen will look something like the one shown on the right.

To open an existing session, select the given session file from the list, then click the **Open Previous Session** button.

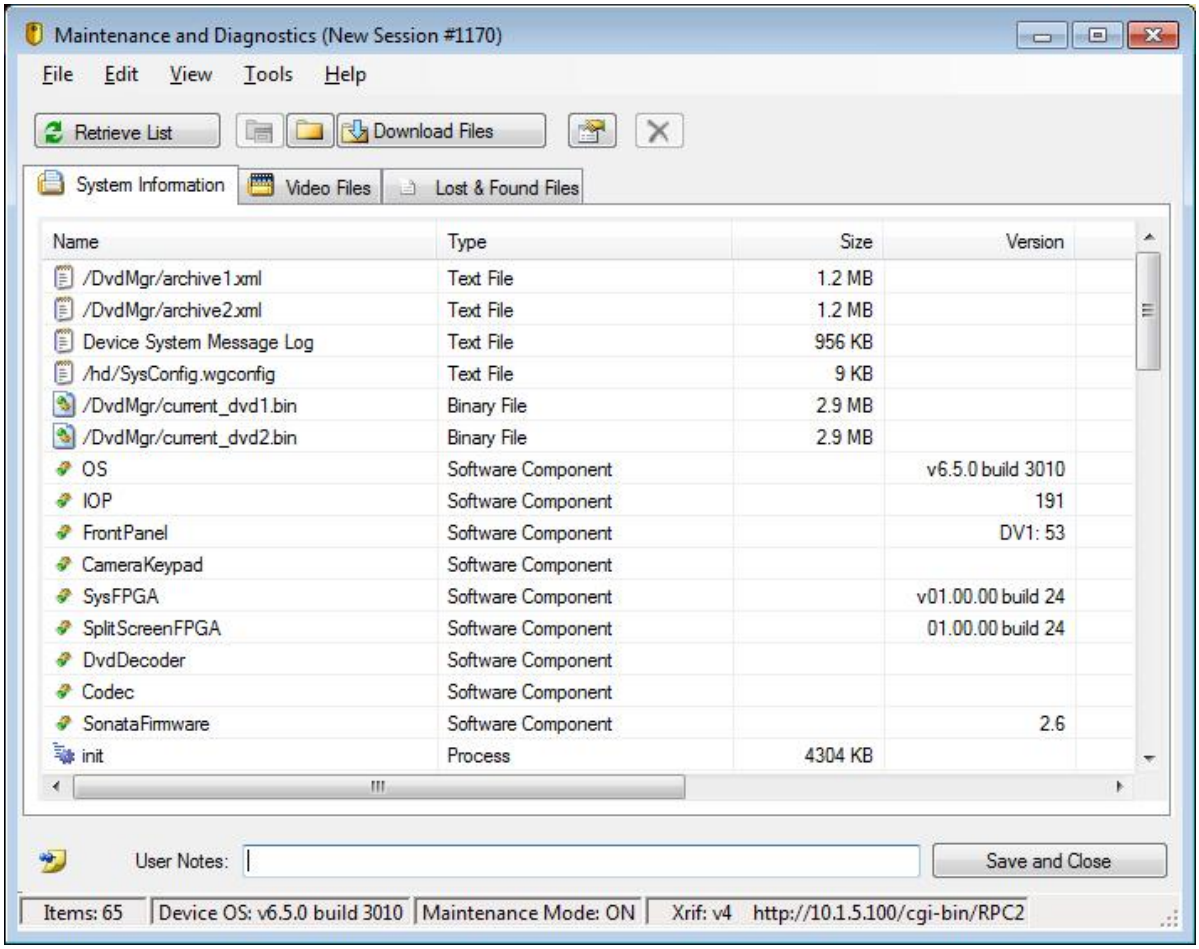
NOTICE
To view a list of previous session files, click the **Explore Session Folder** link. From the resulting folder, delete unwanted session files as desired.

6.3 DIAGNOSTIC SYSTEM INFORMATION

When starting a new session, the **Maintenance and Diagnostics** screen displays, and the application automatically attempts to connect to the DV-1 to extract system information.

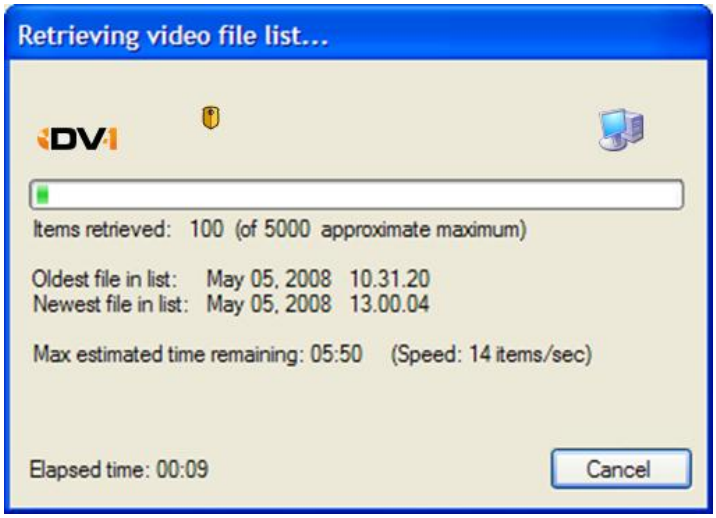
Once the extraction of the information is complete, the **Maintenance and Diagnostics** screen will look something like the one shown below.

The **System Information** tab contains technical details that would be of interest to WatchGuard Customer Service. Most notably, the list item entitled **OS** indicates what version of software is loaded and running within the DV-1.



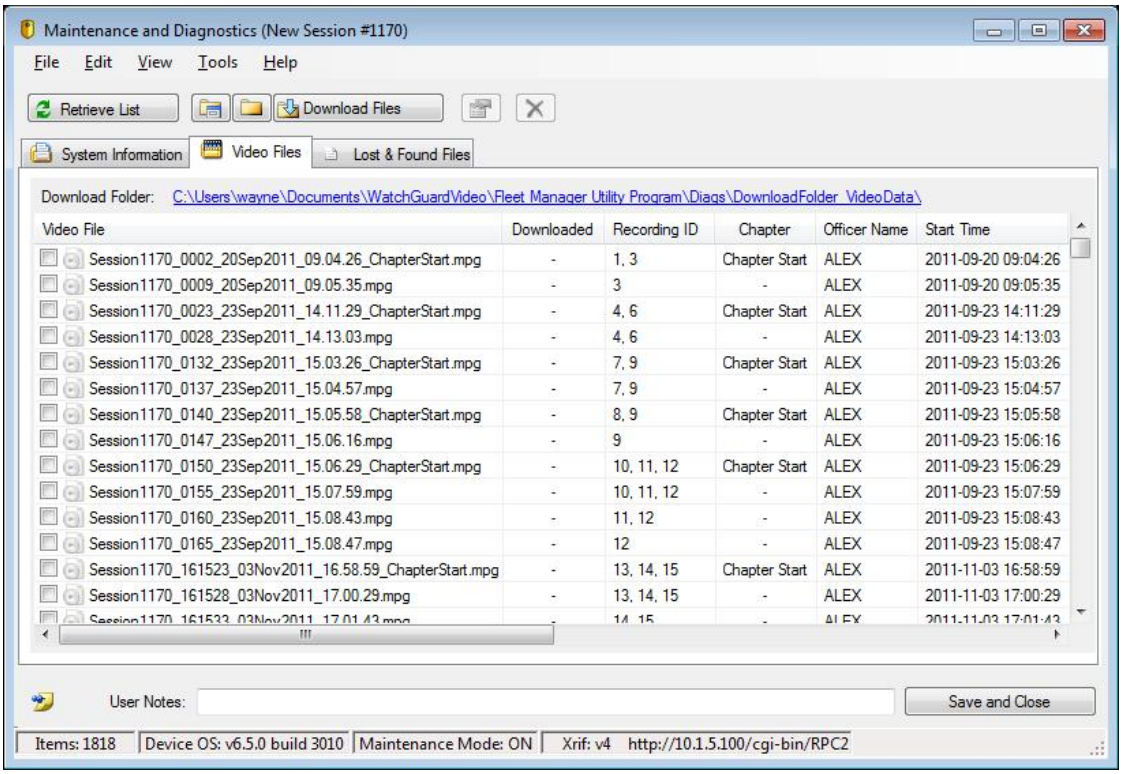
6.4 DV-1 VIDEO FILES LIST

Selecting the **Video Files** tab causes the application to retrieve the entire list of all the video files stored on the DV-1's hard drive. Under normal circumstances and when a DV-1 is full, we would expect to see anywhere between 3000 and 5000 video files in the list returned to the application by the DV-1.



NOTICE
Downloading the list of approximately 5,000 files is a time-consuming process that normally takes 2 to 4 minutes. The operator can cancel this operation in the middle of the process of downloading the list of all video files.

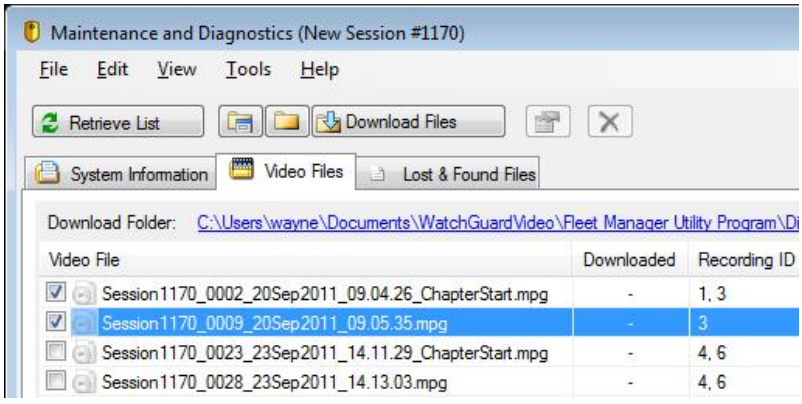
Once the list of video files has been downloaded, the **Video Files** tab will look similar to the screen shown below.



The list of video files may be sorted by any displayed column by clicking on the column header. For example, to sort by Video Start Time, click on the **Video Start Time** column header cell.

6.5 DOWNLOADING VIDEO FILES FROM THE DV-1

One or more of the video files in the list can be downloaded from the DV-1 to the local computer by checking the checkbox to the left of the **Video File** name, and then clicking the **Download Files** button at the top of the screen.

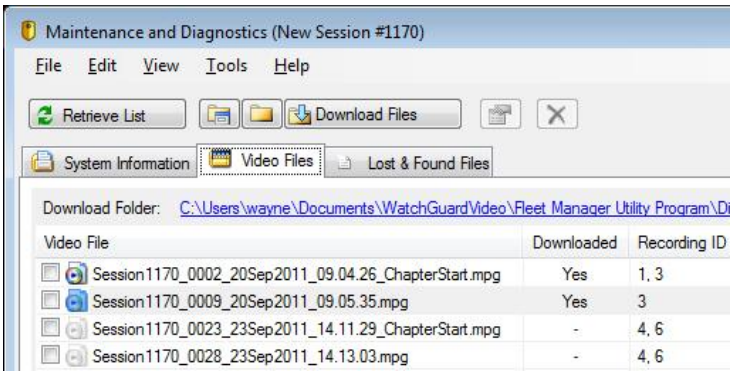


The figure on the right shows the first two video files with two of the checkboxes selected.

By default, the list is sorted chronologically by the **Video Files** column, making the list items at the top the oldest files in existence on the DV-1. The DV-1 is always capturing video and caching it to the hard drive. Even while the *FMU* is in *Maintenance and Diagnostics* mode, the DV-1 continues to write new files to the disk.

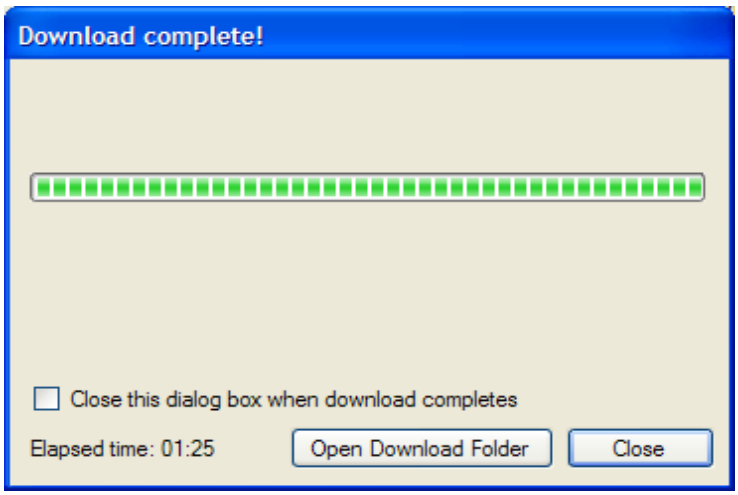
NOTICE
If the hard drive becomes full, the DV-1 begins to continually delete the oldest files to make room for the new files that have just arrived and are being written to disk. It is always possible to be viewing some of the oldest files in the list and those files might be removed by the DV-1 just after the FMU has retrieved their file names. ***In this case, trying to download such a recently deleted file will fail with an error message since the file no longer exists.***

Once the video files have been downloaded to the computer, the file list refreshes. A new icon displays next to the video file name, indicating that a download has occurred.



The **Download complete!** screen displays.

Click **Open Download Folder** to navigate to the location of the downloaded video file(s), or click **Close** to simply exit the screen.



For Windows XP, the factory default download folder is:

`C:\Documents and Settings\<YourUserName>\My Documents\WatchGuardVideo\Fleet Manager Utility Program\Diags\DownloadFolder_VideoData`

For Windows 7, the factory default download folder is:

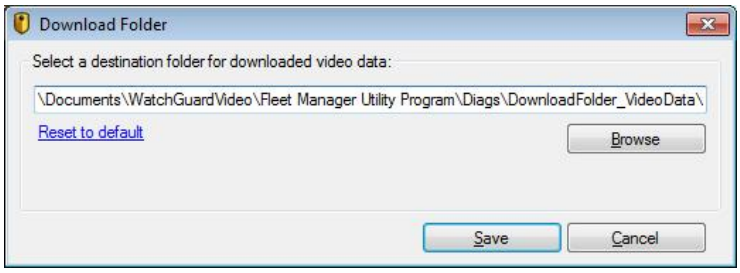
`C:\Users\<YourUserName>\My Documents\WatchGuardVideo\Fleet Manager Utility Program\Diags\DownloadFolder_VideoData`

To navigate to the download folder at a later time, select **Tools** > **Open download folder...**

Once the folder is opened in Windows Explorer, unwanted video files can be deleted as desired.

To manually set a custom value for the destination folder, select **Tools** > **Select download folder...**

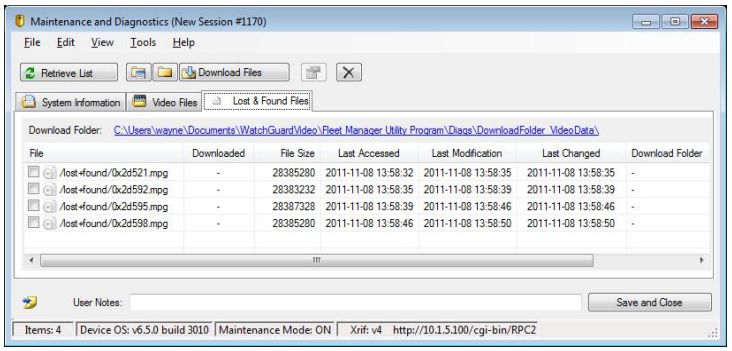
The **Download Folder** window will be displayed and allow for the designation of a custom download folder where video files will be placed. This feature is useful if a USB-connected or network storage device needs to be used as the destination folder for video data if the PC has limited disk space available. Select the **Browse** button to select a new destination folder. Clicking the **Reset to default** link will return the download folder setting to the factory default setting.



6.6 DV-1 LOST & FOUND FILES LIST

The content and operation of the **Lost & Found Files** tab works in much the same way as the video files content. Selecting this tab automatically causes the application to communicate with the DV-1 and starts the download of the files list that the DV-1's operating system has marked as lost and found. Downloading the list of lost and found files from the DV-1 may take 2 to 4 minutes to complete.

The lost and found files can be downloaded from the DV-1 to the computer's hard drive in the same manner as was previously described when trying to download the video files. The lost and found files will likely only be needed when the customer is being directed and helped by WatchGuard Customer Service. The destination download folder setting for **Lost & Found Files** is the same setting as described in the previous section on the **Video Files** tab.



This page intentionally left blank.

7 Ethernet Connection to the DV-1

7.1 IS ETHERNET CONNECTIVITY TO THE DV-1 REQUIRED?

Two possible reasons for needing to connect to the DV-1 through an Ethernet cable are:

1. Uploading configuration settings directly from the *FMU* to the DV-1 (bypassing the need to burn a configuration file to a CD)
2. Running DV-1 *Maintenance and Diagnostics* from the *FMU* (see page 55)

7.2 DV-1 ETHERNET/NETWORK CONNECTION PORTS

7.2.1 Overhead DV-1 Ethernet Connection

On the overhead DV-1, the Ethernet connection is on the side of the unit.

7.2.2 Modular DV-1 Ethernet Connection

On the modular DV-1, the Ethernet connection is on the back of the unit. Plug one end of the supplied Ethernet cable into the modular unit's **Network** port and the other end into the **Network/Ethernet** port on the PC.

WARNING!
Do not mistakenly plug the Ethernet cable into the Wireless Microphone port or the computer's Ethernet port could become damaged.

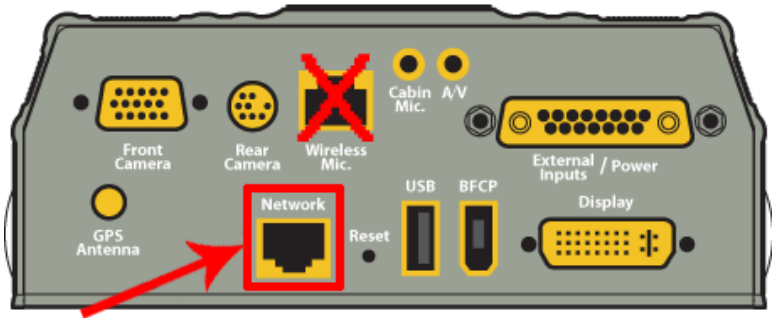


Figure 1 Modular DV-1 Recording Unit Connections

7.3 DV-1 CONNECTION METHODS

There are 2 different ways to connect the DV-1 to a computer:

1. DV-1 to a *Local Area Network* (LAN) via a network router hub (which enables network access to the DV-1)
2. DV-1 directly to a computer

Option #1 requires a regular Ethernet network cable. Option #2 requires an Ethernet CAT 5 (or higher) **crossover** cable (a regular Ethernet cable will not work).

If you have an IT Department, they may be able to supply you with a **crossover** cable, otherwise they should be available at any local electronics or computer store.

7.4 COMPUTER NETWORK CONNECTION SETTINGS

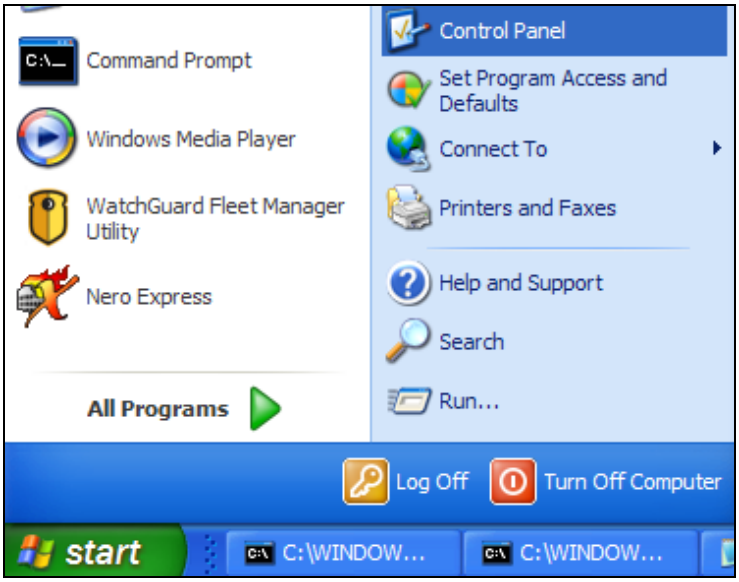
In order to connect to the DV-1 via an Ethernet connection, the computer's network connection settings may need to be modified.

7.4.1 Changing Network Connection Settings

This section describes how to change the IP connection settings on your PC (or laptop computer) so that the *FMU* can properly communicate with the DV-1 system.

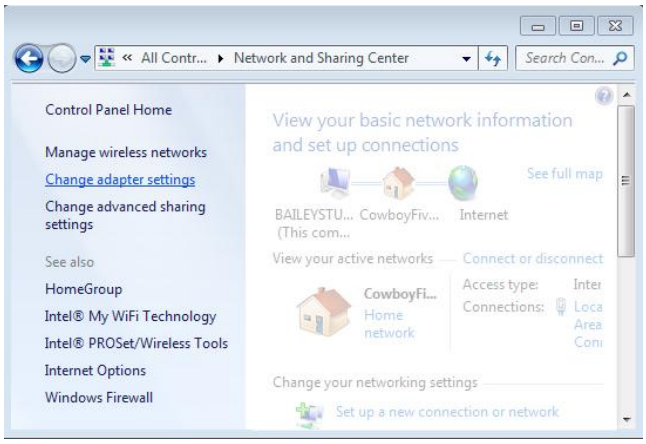
First, physically disconnect your computer from the *Local Area Network* (LAN) by unplugging the network cable from the port on the computer.

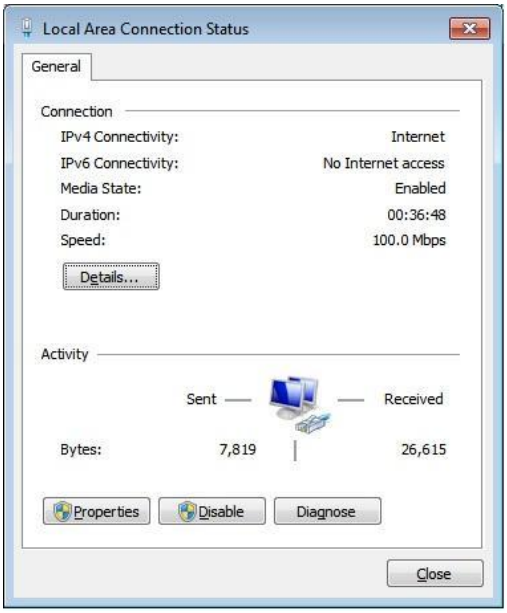
Step 1. Select **Start** > **Control Panel**.



Step 2. From the **Control Panel**, double-click either the **Network Connections** item (for Windows XP) or the **Network and Sharing Center** item (for Windows 7).

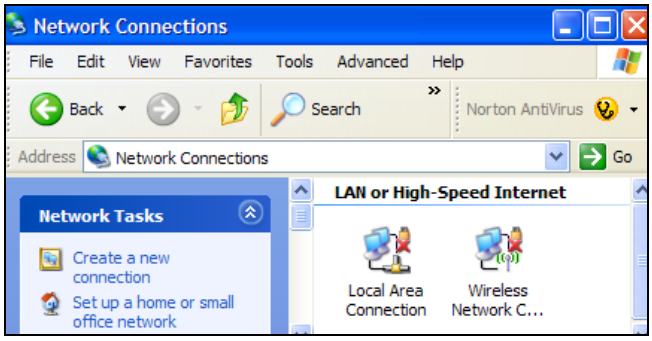
For Windows 7 only, when the **Network and Sharing Center** screen displays, click the **Change adapter settings** link.



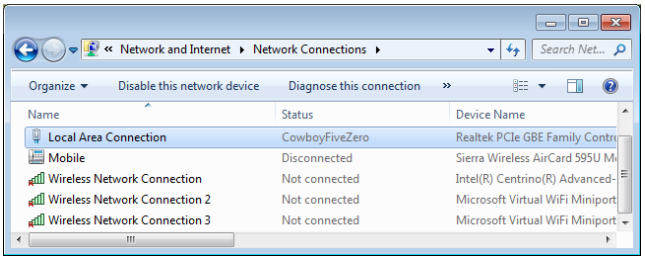


For Windows 7 only, Click Properties.

Step 3. Double-click the **Local Area Connection** item.

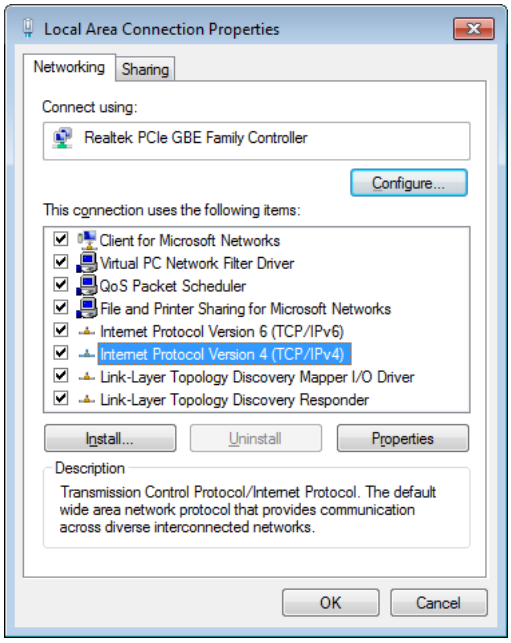


Windows XP:



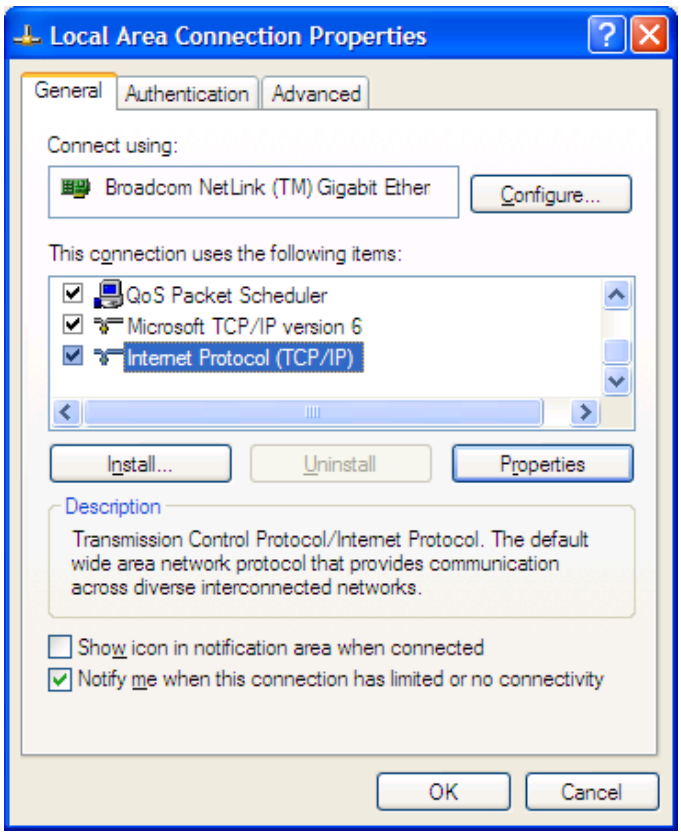
Windows 7:

Step4. Windows 7: Select **Internet Protocol Version 4** and click the **Properties** button.



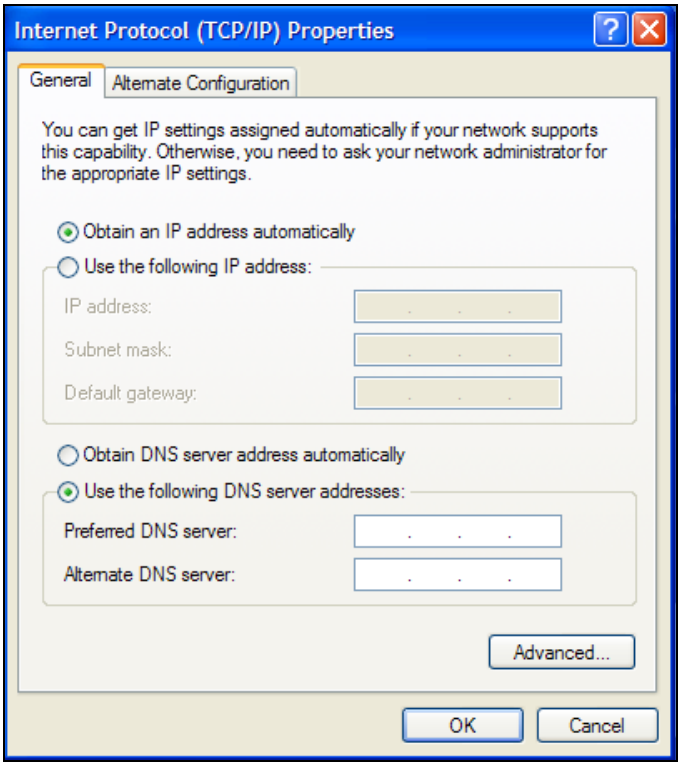
For Windows XP, the **Local Area Connection Properties** screen displays.

Double-click **Internet Protocol (TCP/IP)**.



Step 5. For both Windows XP and Windows 7, the **Internet Protocol (TCP/IP) Properties** screen displays.

Change the radio button selection from **Obtain an IP address automatically** to **Use the following IP address**.



Step 6. If the DV-1's IP address is **192.168.0.123**, then enter the **IP address**, **Subnet mask**, and **Default gateway** as shown in the screen on the right.

If the DV-1's IP address is **192.168.100.123**, then enter **192.168.100.123** as the **Default gateway** and **192.168.100.124** as the **IP address**.

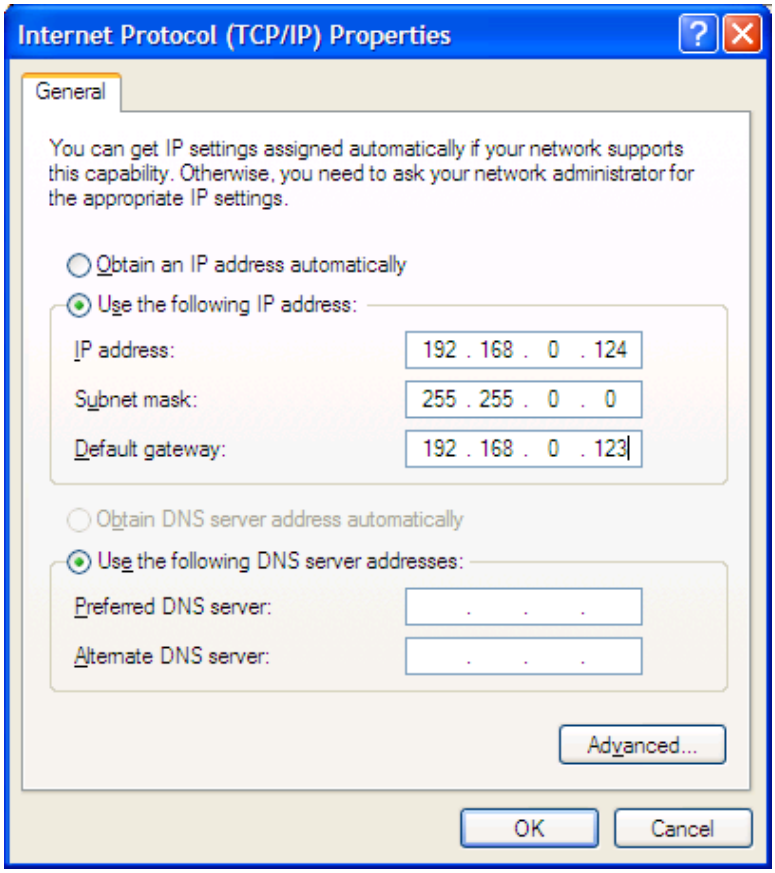
When a three (3)-digit number is entered, the cursor automatically shifts to the next field. When you enter a single-digit number such as (0), you can shift to the next field with the *[Right Arrow]* key.

Click **OK** when done.

The screen closes and returns to the **Local Area Connection Properties** screen. Click **OK** again. The IP address on the computer is now changed.

Reconnect the Ethernet cable to the computer.

The *FMU* should now be able to communicate with the WatchGuard Video DV-1.



7.4.2 Restoring Network Connection Settings

When finished using the *FMU* to communicate with the DV-1 via the Ethernet connection, change the network connection setting back to **Obtain an IP address automatically**. If this original setting is not restored, the computer's internet connection may not work properly after physically reconnecting it to the LAN.

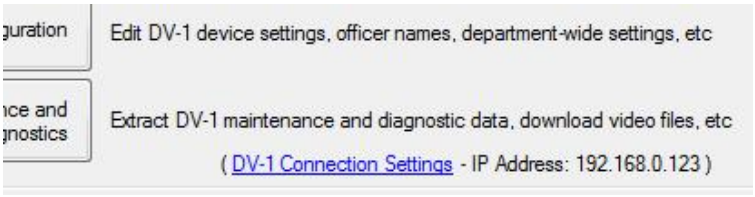
See *Changing Network Connection Settings* on page 64 for steps to access the network connection settings.

7.5 CONNECTION SETTINGS INSIDE THE FLEET MANAGER UTILITY

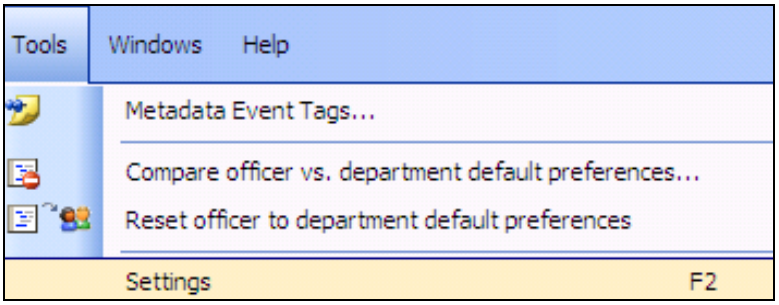
The DV-1 device is shipped from the factory with one of the following default assigned IP addresses:

- **`192.168.0.123`** – Old systems
- **`192.168.100.123`** – New or refurbished systems

The *FMU* expects to find the DV-1 device at one of these locations; therefore, in most cases, these values do not need to be changed in order to connect to the DV-1 device. The default IP address displays on the *FMU*'s opening screen next to the **DV-1 Connection Settings** link in the lower right-hand corner of the screen.

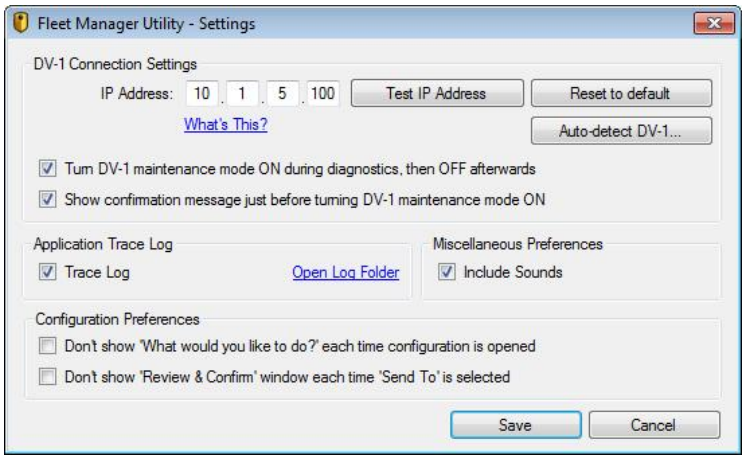


To change the IP address setting, click the **DV-1 Connection Settings** link from the opening screen, or select **Tools** > **Settings**. (*Tip*: the F2 hotkey is a shortcut to the **Settings** screen.)



The **Settings** screen displays.

To check whether the current IP address can successfully connect to the DV-1, click the **Test IP Address** button. This tests both the physical and logical connection between the *FMU* and the DV-1. If the DV-1 is unable to connect at **`192.168.0.123`**, try **`192.168.100.123`**.



If the DV-1's IP address is not found, run the **Auto-detect DV-1...** function to find all DV-1 devices available on the network. If the DV-1 is still not found on the network, even when doing an auto-detect, it may be necessary to manually enter an IP address on the DV-1 itself. For information on how to do this, see the *DV-1 User Manual*'s Network Configuration section.

Once the IP address settings are correct, click **Save** to return to the previous screen.

8 Index

A

Add Wizard Icon, 42

C

Cautions, 6
CD
  creating, 22, 25
CD Burning Software
  personal, 25
Computer Network
  Connection Settings, 64
Configuration Button, 13
Configuration File
  as a master template, 37
  burn CD using favorite tool, 25
  burn CD using Windows CD writer, 22
  create CD, 20
  default file extension, 15
  master template, 17
  send to CD, 21
Configuration Files
  importing to DV-1, 25
  multiple, 16, 36
  single, 16
Configuration Settings
  copying/pasting, 38
  drag/drop, 38
  editing, 27
Configuration Strategies, 15
Configuration Wizard, 17
Connecting DV-1 to PC, 63
Contact Information, 8
Create CD
  configuration file, 20
Crossover Cable, 14, 64

D

Default IP Address, 14, 70
Department Default Preferences
  configuring, 29
  mismatch, 21
Department Name
  entering, 18
Department Policies
  setting, 28
Department Preferences
  copying, 39
Diagnostic Sessions, 55
Diagnostics, 55
  system information, 57
Dropdown List Event Tag
  definition, 41
  example, 44
  manually adding, 47
DV-1
  configuration strategies, 15
  connecting directly to PC, 64
  connecting to, 14
  connecting via LAN hub, 64
  default IP address, 14, 70
  diagnostics, 6
  downloading video files from, 59
  ethernet crossover cable, 6
  Ethernet/network connection ports, 63
  importing config. files, 25
  lost & found list, 61
  maintenance, 6
  modular ethernet connection, 63
  overhead ethernet connection, 63
  video files list, 58
DV-1 View Icon, 41

E

Edit Wizard Icon, 42
Ethernet Cable, 14, 64
Ethernet Connection
  to the DV-1, 63
Event Tags, 41
  adding, 43
  adding dropdown list, 47
  adding text field answer, 49
  changing the order of, 52
  default optional answer, 46
  definition, 41
  dismissing prompt, 47, 48, 50, 51
  dropdown list example, 44
  editing, 52
  hidden, 41
  is tag visible...option, 47, 48, 50, 51
  main screen, 42
  metadata field name, 46
  optional, 41, 47, 51
  order, 42, 52
  pre-defined templates, 43
  required, 41, 48, 50, 51
  response timeout, 47, 48, 50, 51
  static answer value, 51
  text field example, 46
  types, 41

F

Factory Default Settings, 32
  department, 32
  policies, 33
  vehicle, 35
Field Name In Use Icon, 42
File Extension
  default, 15
Fleet Manager Utility
  department default policies, 33
  department default preferences, 32
  installing, 9
  launching, 12
  vehicle default preferences, 35

G

Getting Started Configuration Wizard, 17
  completion, 20
  department name, 18
  officer list, 19
  time zone, 18
  vehicle identifier, 18
  video quality, 19

I

Icons, 41
  add wizard, 42
  DV-1 view, 41
  edit wizard, 42
  event tag order, 42
  field name in use, 42
  info, 42
  print, 41
Importing Config. Files to DV-1, 25
Info Icon, 42
installing the Application, 9
IP Address, 14, 70

L

Large Departments
  multiple configuration files, 16
Launching
  FMU, 12
Lost & Found List, 61

M

Maintenance, 55
Maintenance and Diagnostics, 55
  downloading video files from DV-1, 59
  lost & found list, 61
  video files list, 58
Maintenance and Diagnostics Button, 13
Master Template Configuration File, 37
Metadata Event Tags, 41
  button, 42
  definition, 41
Modular DV-1
  ethernet connection, 63

N

Network
  connection ports, 63
Network Connection, 63
Network Connection Settings
  changing, 64
  for connecting to the DV-1, 64
  restoring, 69
Non-editable Default Event Tag
  creating, 51
Notices, 6

O

Officer
  supervisor permissions, 20
Officer List
  copying, 38
Officer Names
  adding, 19
Officer Preferences
  configuring, 29
  mismatch, 21
  reset, 22
Opening Screen, 13
Overhead DV-1
  ethernet connection, 63

P

PC Network Connection Settings
  changing, 64
Policies, 28
Pre-defined Dropdown List
  example, 44
Pre-defined Event Tag Templates, 43
Pre-defined Text Field
  example, 46
Preferences
  department, 29
  officer, 29
Print Icon, 41
Properties
  copying/pasting, 38
  drag/drop, 38

R

Related Documents, 8
Response Timeout, 47, 48, 50, 51
Restore Network Connection, 69

S

Screen Icons, 41
Selectable Answers
  in a dropdown list, 47
Send to CD, 20, 21
Small Departments
  simple configurations, 16
Software Installation, 9
Software Updates, 8
Supervisor Permissions
  granting to officers, 20

T

Text Field Answer
  event tag, 49
Text Field Event Tag
  definition, 41
  example, 46
  manually adding, 49
Time Zone
  setting, 18

U

Updates, 8

V

Vehicle ID
    entering, 18
Vehicle Settings
    configuring, 30
Version Information, 12
Video Files
    downloading from DV-1, 59
Video Files List, 58
Video Quality Mode
    entering, 19

W

Warnings, 6
Windows CD Writer
    using, 22

Fleet Manager Utility (FMU) Getting Started Guide

WatchGuard Video
415 Century Parkway
Allen, Texas 75013

1-800-605-6734 Toll Free Sales
1-866-384-8567 Toll Free Support